Chapter 5.

COMPUTER HARDWARE

Chapter 5. Computer Hardware

In this chapter, a hardware related to the input/output processing of the data bank system proposed in Chapter 4 was investigated in connection with the volume of data expected to treat and, also, a recommendation for data communication and utilization method among offices was made as a future plan.

Further, a job and a organization to be newly required for operating and maintenance of the data bank system were investigated together with the work volume coming in addition.

As for the said computer resources, an investigation was made on the premises that data be treated and handled by means of a batch system and that IMS be utilized for treatment of the data base.

In the followings, a computer hardware related to input/ output processing is described in Section 1; the volume of the data to be treated and computer resources in Section 2; data communication in Section 3; job and organization in Section 4; and work volume in Section 5.

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5-1 Computer Hardware Related to Input/Output Processing

(1) Input Processing

The results of the analysis of the data structure as proposed in Chapter 4 led us to a conclusion that the following preparation procedure for input data be recommended from the reasons that it is inevitable for experts to take part in the said job, a sufficient proof of data is necessary prior to input and a cycle of data occurrance is relatively lengthy. Fig 5-1 shows a schematic diagram for input data processing procedure.

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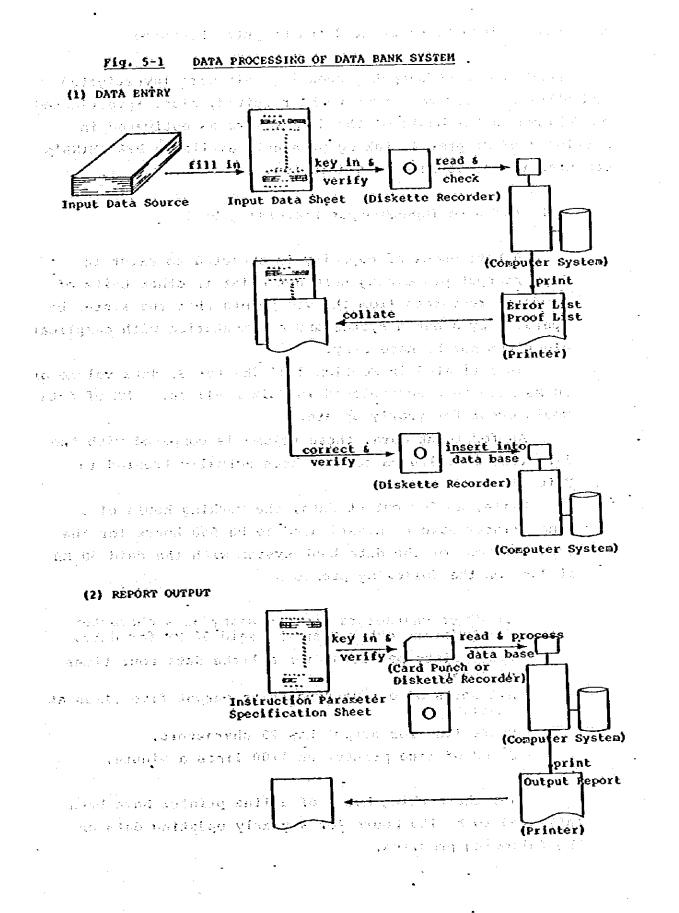
1) to select data from the source document (APPENDIX II) and record them on data sheets.

2) to key data on diskettes

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e e e construction de la 3) to verify data by keying again. 4) to input data to a computer system from the diskettes and print out error lists and proof lists. an an taon an an an an an antar an an taon an taon an Autor an Autor an Autor an Autor an Autor an Autor an Aut 5) to collate data in the said lists and, if any errors, to correct data on the diskettes. an a sea dha a chan air a chan an sine dheachar the seachar 6) to establish or update the data base by inputing data from the diskettes. (2) Output Processing and the Providence to reach a second second second 医后端 机动脉 网络普通学 法公共 The data stored in the data base is utilized for the purposes of outputing the reports as proposed in the second Chapter 3. Commence and construction of a light and group of the such Figure 5-1 shows a conceptual diagram of output data processing. The said output reporting method is classified into the following two categories. Head and the second routine réport 1) o en la partente de partent Ét This would be output periodically in a batch after all necessary data are prepared in the 化氯化化化 医结合 的复数自己 法法律法律法 医结核结核结核 data base. The provide state of the test of test irregular report 2) This would be output irregularly to obtain basic information required for a specific purpose. u ngerapané 上,你来你不能,我们是我的好好。" 医白白 化过氧化合 化过去分词 化过氧化合物 化化合物 化分析 网络爱尔林 医鼻囊 化偏量素

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5-2 Data Volume to be treated and Computer Resource

Loads to input/output processing unit were investigated and other computer resources to be required, also, investigated as follows on the basis of the data volume as estimated in Section 2 of Chapter 4, taking presently available PERTAMINA's computer resources into consideration.

(1) Loads to Input/Output Processing Unit

A bottleneck of capacity is expected to exist in input/output processing unit not exist in other units of computer resources from the viewpoints that the system be operated by a batch system and a computation with complicated algorithm not be necessary.

As estimated in Section 2 of Chapter 3, data volume of 50 MB have been accumulated in Unit EP-II and 5 MB of data would occur for yearly update.

As for input data, these volume is compared with the date volume of 110 MB to have been actually treated in Unit-II.

While, as for output data, the working hours of a line printer have been estimated to be 550 hours for the establishment of the data bank system with the said 50 MB of data on the following premises.

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- 50 MB of characters are necessary as a character for printing other than the said 50 MB for data.
- Proof lists be output for all the data four times at least.
- All sorts of output reports be output five times at least.
- Every line for output has 25 characters.
- Speed of line printer be 1100 lines a minute.

Also, the working hours of a line printer have been estimated to be 150 hours for a yearly updating data on the following premises.

- 5 MB of characters are necessary as a character for printing other than the 5 MB for data.

- Proof lists be output for a yearly updating data four times at least.

All sorts of output reports be output two times yearly at least.

- Every liné for output has 25 characters.

- Speed of line printer be 1100 lines a minute. 经济保险 网络封持与于古伦斯曼和自己的专家的 人名英格兰人姓氏贝尔

(2) Computer and Peripheral 后,我就是我们是你就能是你是我都能能自己。""我们的你们不知道了。""你是你是不是我们。"

In this, an auxiliary memory storage and a central processing unit were investigated in connection with the volume of data to be processed. 建铁合金橡胶 化建物酶 经收益 医致死的 化中心试验检试验 人名法布法布 医不良

1) Auxiliary Memory Unit Part of the second of the second second second second

Data and programs are to be stored in an auxiliary memory unit. A detail allocation of the above on the unit can not be decided unless an arrangement of data and a specification of programs are detailed in the further system désign: Howéver, two units of 3340 type of disk with 70 MB are expected to be sufficient because

that 125 MB is estimated necessary as described in the following. The sub-case between the second second

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(Estimates are made for data volume of 50 MB with 50 percent margine for indexes and pointers).	75 MB
- for INS's programs	30 MB
- for application programs and a specification of the data base	20 MB
Total	125 MB

In addition to the above disks, one magnetic tape is to be necessary for IMS's system log.

In case of a future on-line system with CICS (Customer Information Control System) or DMS (Development Management System), one more of 3340 type will be necessary coming in addition.

2) Central Processing Unit (CPU Main Storage)

The real main storage capacity of a central processing unit to be required can not be estimated exactly as it works as virtual storage, which transfers programs to/from its auxiliary memory units.

And it would be so effected by the programs running parallel with, that it would be determined on the actual experienced base. In this, also, references is made to Table 5-1 in which examples in Japanese industrial firms have been made public.

The central processing unit with the real memory of 1 MB has been operated under operating system with OS/VS1 in Unit-II.

It is clear from the examples in Table 5-1 that no addition to CPU memory is necessary even that IMS has to be introduced in a batch processing to the present system in addition.

However, in case of on-line system with CICS or IMS/DC, there are examples such as A - D in Table 5-1, of which computers have a real memory more than 1.5 MB.

Further, it is reported, not as exampled in Table 5-1, that a bad response causes trouble in case of a computer system with the real memory of 1 MB which has been operated under OS/VS1, DL/I (Data Language I) and CICS. Consequently, it seems to be necessary to enlarge the real storage size to 1.5 MB in case of a on-line system to be added in future.

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5-3 Data Communication

The data bank system by means of a batch system would be established by inputing the data which have been accumulated and stored in Unit EP-II, and then would be operated by updating the data.

For the time being, these input data would be delivered by manpower or mail field offices to a unit head office and also output reports would be distributed by a manpower or a mail to offices concerned.

In this, a future plan for these data communication is plotted as described in the followings.

(1) Data Communication between Field Offices and Unit Head Office

In case of a remote job entry system, data are delivered to a computer in a head office from a remote terminal in field offices through a communication line.

In this system, operator at the remote terminal can input data to the computer, execute programs and receive the output, while, of cource, it is possible to output at a printer in the head office.

If data are delivered in a batch, a dedicated line seems not to be necessary as a communication line but a switched line seems to be quite sufficient. However, this has the demerit that requires the experts who have a enough knowledge as to how to operate equipments concerned at the remote terminal.

As data are expected to be too small amount in comparison with the capacity of a available remote terminal system as far as the data bank system is concerned, this system should be introduced only in connection with the other jobs. The data bank system is still very useful even that it has a data communication system by manpower mail for the time being.

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Consequently, introduction of this system should be discussed in the light of the experience of operation which will have been accumulated.

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(2) Data Communication between Unit Head Office and Jakarta Head Office

Dáta flows hierarchically Unit head office to Jakarta Head Office or révérsély and very rarely among unit head officés.

Therefore, it is considered that a hierarchical communication between Unit head office and Jakarta head office is much more suitable than a ring-line communication among unit head offices.

In case of data communication among Unit head offices, it would be carried out via Jakarta head office. For the time being, data of the data bank system of Unit-II are to be delivered to Jakarta head office by mailing magnetic tape storing data. When a data communication line is available between them in future, data which Jakarta head office needs is to be obtained by the following procedure.

- Call a computer of a Unit head office by dialing and connect a remote terminal equipment to a line.
- 2) Receive a required data from the computer of the unit and store these in diskettes.

Output the data from the diskettes when it is needed.

As mentioned in the above, Jakarta head office can make use of data bank system of Unit head offices as it is.

There are demerits that it is required for operator to be between and it takes time to get data, while there is a merit that Jakarta head office does not need to have a depulicate of data.

In case that direct conversation with a data base from offices is necessitated, one idea is to have a on-line system. In this, a general comments are described as follows related to a on-line system.

A direct conversation by on-line system will be made between computers and between CRT display or typewriter terminal and a computer. In a on-line system, the quick response can be accomplished, however, a dedicated line is to be necessary in most cases because of much occupancy of a line, and also, it is necessary not only to prepare on-line programs and programs for a communication control but also to utilize more computer resources.

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Users should be responsible for managing the data bank system because it is the users that have knowledge of what data is, while computer operators should be responsible for the technical maintenance of the data bank system such as reorganization of a data base and maintenance of application programs.

Following are jobs for users and computer operator coming in addition by introduction of the data bank system into Unit-II.

(1) Suser's Side margin management of the second state

- establishment of an input data route

- preparation and custody of input data
- updating and maintenance of code system
 - updating and maintenance of master file

- hearing and elaboration of user's requirement

- control of output reporting
- data communication between offices

(2) Computer Operation's Side

- definition of data and data structure
- grasping actual utilization performance of data base
- reorganization and restructuring of data base
- maintenance of application programs

- preparation of additional application programs

- consultation of users

- maintenance of the following manuals

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- operation manual

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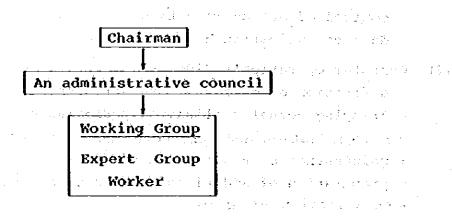
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As mentioned in Section 1 of Chapter 4, the data stored in the data base consists of seventeen data structures of which each has segments. Therefore it is the most efficient to maintain and update an input data in a segment unit. And, it is the most efficient too, to prepare and custody these data in a concentrated manner at one place as data is scattered in various departments. It is the same with the code system and master files.

Importance should be put on a settlement of regulations of the data bank system utilization.

There are six departments such as exploration, exploitation, production, drilling, technical and gas in Unit EP-II. It is experts of respective departments that have knowledge of what data is.

Management of the data bank system has to be carried out in the manner that draw and elaborate opinions of the above experts. From this standpoint, the following organization is proposed to establish comming in addition.



The administrative council for the data bank system will be made up of representatives of the said six departments and will be highest responsible for managing the data bank system.

The council will set up fundamental principles relating to regulations of the data bank system utilization, an input data route and a data communication and will give chairman an authority to perform the management job in accordance with the principles. For the purpose of managing the data bank system chairman will organize and supervise the working group which consists of an expert group and workers.

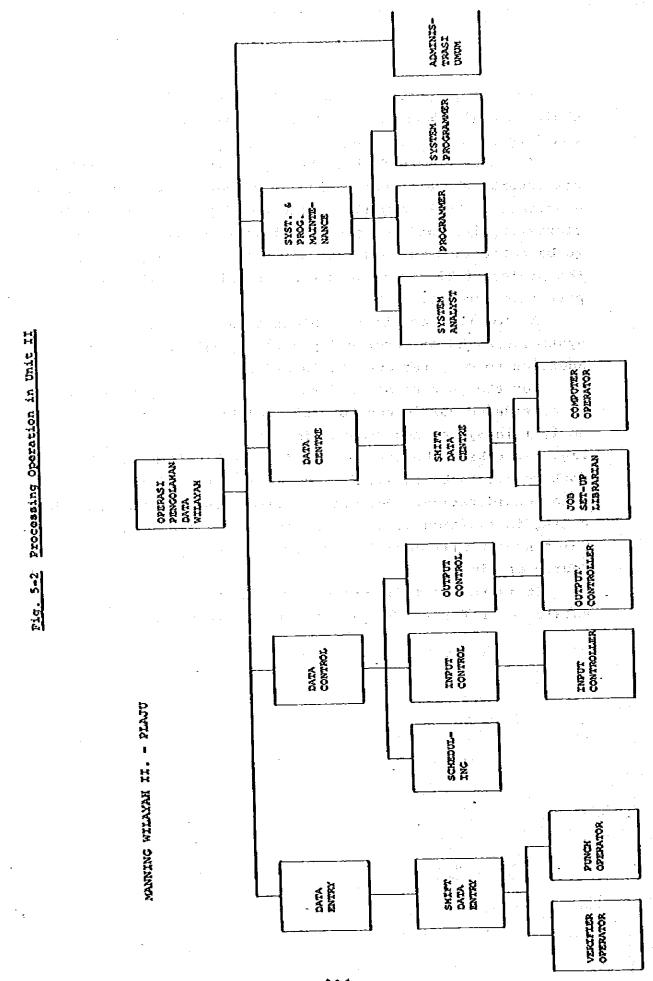
It is recommended that the expert group be composed of six experts who are senior class engineer and come from each department. Workers will be made up of junior class engineers, clerks, typists and temporary employees and their number is to be determined variously in accordance with a progress of the project taking work volume as described in the latter part into account.

As for the technical maintenance of the data bank system, a new job as described previously will be comining in addition to computer operator's side.

For the purpose of performing the job newly come up, is considered sufficient to assign additional one system analyst in System and Programming Maintenance section of Fig. 5-2 taking the size of the data bank system and the work volume to be expected as mentioned in the latter part into consideration. One system analyst can perform the job coming in addition with the assistance of consultants of which number will depend on work volume changing in the course of time.

It is required for the system analyst to have full knowledge of IMS and be good consultant to users.

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5-5 Work Volume

In this, estimates were made for the work volume required for input data preparation and maintenance and updating of application programs, on the basis of loads to input/output processing unit as mentioned in Section 2 of Chapter 5 and number of steps of application program as mentioned in Section 6 of Chapter 4.

Further, estimates were made for a manpower of consultants required during the period establishing the data bank system and the period of a normal operation.

(1) Preparation of Input Data

As estimated in Section 2 of Chapter 4, 50MB of data is considered to be kept in Unit BP-II and 5MB be come out yearly for updating.

Further, it is reported that Unit-II had treated 110MB of data throwing ten key punchers during 1977. Consequently, it is estimated that 55 man-months and 6 man-months are required for key punching of the data stored and the data for updating respectively.

As for the work for input data preparation, there are jobs other than punching, such as a review and an arrangement of source data, recording data in data sheet, and proof and correction data:

On the basis of the figures mentioned above, estimates are made for manpower required for performance of the said jobs, as follows, considering actual performance of Japanese industry.

이는 것으로 나오는 것으로 것으로 가지가 이렇게 정확한 것같다. 알려 방송가지는 것이 같이 가지 않으면 이 모든 이 바람이 모두 가족 가지만 가지운 것이 있는 것 같은 방송은 보인 것 같이 있다. 지구하게 가지 것이 되고 있는 것이 가지만 것 같은 말 같은 말 같은 말 같은 것 같이 있다.	of data base	yearly updating (man-month)
1) review and arrangement of source data	165	18

	•	establishment of data base (man-month)	yearly updating (man-month)
2)	recording data in data sheet	110	12
3)	punching data in diskette (including puch for proof)		
4)	proof and correction of data Tot	110 al 110440 de de qu	12
	It is noted that experts are nece	ssitated for per	form

ing job 1) and 4) in the above. The second stand of the second en e ser a ser e se

Maintenance and Updating of Application Programs (2)

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Application programs to be prepared at the establishment of the data bank system are not considered to be a complete one but one tested through two or three times debugging, These are to be corrected through their actual executions. 130,000 line statements of programs are estimated to be corrected during three years since a start of the operation based on the total line statement of application programs as estimated in Section 6 of Chapter 4. Further, new application programs have to be prepared in accordance with the user's requirement coming in addition. 10,000 line statements of programs are expected to add yearly. 1946-126-1663

In conclusion, the following manpower of system analyst is to be required for performing the said job.

	Three years operation		12 man-months
. :	After three	years	6 mán-months

(3) Man-power of Consultant

It is to be expected that consultants design, program, make a test run and introduce the data bank system in Unit-II and, also, the said consultants is expected to prepare manuals related to the data bank system such as system manual, user's manual, operation manual and program manual.

二、二日 海豹百姓制 古语 封印法的现在分词

For the purpose that PERTAMINA prepare the input data for the data base and perform the maintenance of the data bank system with the organization as described in Section 4 of Chapter 5, it is recommended to have the direct guidance from the said consultants who will consult and train the personnel concerned with project based on the above-mentioned manuals.

Hanpower of consultants to be required are estimated as follows.

	three months of input data preparation stag	je
	Exploration expert	1
-	Drilling expert	1
	Pètroleum Engineer	1
	Réservoir Engineer	1
	Mechanical and/or Process Engineer	1
	System Analyst	1
-	two months of system introduction stage	
	System Analyst	1
•	System Programmer	1
	System Operation Expert	1
	Programmer	1
÷	Three years after introduction of the data	bank system
	System Analyst	2

- Over the above period

periodical observation by designer 2 man-months/year

LIST OF APPENDIX

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APPENDIX I

OUTPUT REPORTING METHOD

FOR

THE PETROLEUM EXPLORATION AND PRODUCTION DATA BANK SYSTEM OF PERTAMINA UNIT EP-II

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INTRODUCTORY REMARKS

- I. A limit of data to be retrieved would be given on the output according to instruction by "Assignment Parameter" in METHOD.
- II. An order of output data would be given according to instruction by "Sorting Parameter" in METHOD.
- III. "Item number" in Output Item is referred to "Item No." in APPENDIX II, so that properties of data in "Item name" can be made clear by reference.
- N. As described in the text, there are three kind of output method, namely Basic Output Reporting Method, Combined Output Reporting Method and Statistical Output Reporting Method. All these are listed up in "Diagram Index of Output Reporting Method".

However, the detail description is made for only the bas output reporting method in this APPENDIX, because such descri tion is made for other reporting methods in the text.

The above basic output reporting method is grouped hierarchically in "Diagram Index of Output Reporting Method" and abbreviated in the form such as A0-, B0-, ----, namely with 0 after an alphabetic letter.

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4 1	$= \sum_{i=1}^{n} \left(\frac{1}{2} + \frac{1}{2}$	-
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1 A-GEOLOGICAL DATA AND RIGHT HOLDER'S AREA INFORMATION

AI - 7

1-1 DIAGRAM INDEX OF OUTPUT REPORTING METHOD

			påge
A0-1	چه چو دو چو زند متر بد تب بد چه در مد مد بد بر من ۱۹	Right Holder's Area	AI - 13
	<u>A0-11</u>	Original Area	AI - 14
	A0-12]	History of Relinquishment	AI - 16
A0-2	مند سد بند بند مد مد هد به هو به به بد جد به به بند ب	Geological Survey	AI 18
A0-3		Geological Analysis	AI 20
A0-4		Prospect Information	A1 - 22
A0-5		Map and Figure Information	A1 — 24
A0-6		Report Information	A1 - 27
Al	***************	List of Concession Area	
A2		List of Contract Area	
A3		Geological Survey List by Year	
A4		Geological Analysis List by Year	
A5		Exploration Activity Summary by Year	4
A6		List of Map and Figure	
A7	************	List of Report	
A8		Well Lithological Formation Information Summary	
A9		Lithològical Core Descripti Summary	OŇ
A10		Litholigical Side Wall Core Description Summary	
A11		Hydrocarbons Indication Sum	mary
A12		Correlation of Formation To	ps
A13		Bstimated Hydrocarbons in P and Recoverable Reserves	lace
A14		Bstimated Hydrocarbons in P by Formation	lace
A15		Bstimated Hydrocarbons in P by Type of Trap	lace

1-2 Conceptual Specification of Output Reporting Method

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Assignment Parameter

- Province name
- Contractor name
- Contract name (code)
- Period

Sorting Parameter

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Conditions of Changing Page

- Processing to the next concession area code

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Data items for this method consist of ;

- Items in METHOD A0-11 (Page AI- 8) and

- Items in METHOD A0-12 (Page AI-10)

However, consideration would be taken to avoid improper repetition of data items

Rémarks

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METHOD A0-11 ORIGINAL AREA

Assignment Parameter - Province name - Kind of contract - Contractor name - Contract name (code) - Period

Sorting Parameter

- Contract date (Contract started date)

antale in the second second

Conditions of Changing Page

- Proceeding to the next concession area code Output Item

No.	Item name	Unit	item numbér
1			A100-1
2	Province name		-2
3	Contract date		-3 50 (199
4	Contract area name		-4
5-	Agreement		-5
1	Title		-1
2	Identification		-2
6	Kind of contract		-6
7	Contractor name		-7
8	Period of contract		-8
9-	Identification of contract		
	area map		-10
l	Identification number		A500-7-2
2	? Title		-1
3	Scale		-15

• •

No.	Itém name	Unit States	Item number
10	Original size of contract area	[km ²]	A100-1
11	Boundary points of original area		A120-1
12-	Mercator coordinate of each point		
1	Latitude (N)	[deg] [min] [sec]	andra da antes Antes Antes
2	Longitude (B)	[dèg] [min] [séc]	-2

Rèmarks

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METHOD A0-12 HISTORY OF RELINQUISHMENT

Assignment Parameter	
- Province name	an an an an Arrange an Arrange an Arrange an Ar
- Kind of contract - Contractor name	一般的人的意义是不可以不知道,我们的人们也不是有了。 1993年———————————————————————————————————
- Contract name - Period	

Sorting Parameter

Relinquished date

Conditions of Changing Page

- Proceeding to the next concession area code

Output Item

No.	Item name	Unit	Item number
1	Contract name		A100-1
2	Province name		-2
3	Contract area name		-4
4-	Agreement		-5
1	Title		-1
2	Identification number		-2
5	Kind of contract		-6
6	Contractor name		-7
7	Original area size	(km ²)	-10
8	Relinguished area size	{km ² }	A110-3
9	Contract period		A100-8
10	Ratio of area size	[%]	
11	Relinguished area name		A110-1
12-	Maps drawn relinquished a	rea	-4
1	Identification number		A500-7-2

-.

No.	Item hame	() Unit	-	Item number
12-2	Title			A500-7-1
3	Scale			A500-15
13	Boundary points of relinguished area			A111-1
14-	Mercator coordinate of each boundary point			A111-2
. 1	Latitude (N)	[deg] [min] [sec	•	-1
2	Longitudė (B)	[deg] [min] [sec		-2

-

Remarks

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METHOD A0-2 GEOLOGI	CAL SURVEY
Assignment Parameter	
- Area name	
- Kind of survey	
- Survey name (code)	
- Period	tota attack includes t
Couldar Daramatan	a ta catalan da sa sa sa

Sorting Parameter

Condition of Changing Page

المعديد والمعادر

- Proceeding to the next survey code

Output Item

No.	Item name	Unit	Item number
1	Survey name		A200-1
2	Kind of survey		-2
3	Unit name		
4	Àréa name		-3
5-	Identification of main surv	vey report	
1	Title		-4
2	Number		-5
6	Locality name surveyed		-6
7	Survey period		-7
8	Survey personnel		-9
9	Company name		-10
10	Party month		-11
11	Total traverse measured	(m)	-12
12	Approximate geologically	{km²]	
	compiled area size		-13
13	Total drilled depth	(m)	-14
14	Total number of shallow we	11	-15

15- Total cost	A200-16
1 U.S.\$	[U.S.\$] -1
2 Rp	(Rp) -2
16 Exchange rate of Rp to U.S.	\$17
17- Main map prepared by survey	
1 Identification number	A500-7-2
2 Title	All for the second s
3 Scale	-15
4 Prepared date	-6
18- Mian figure prepared by sur	vey A210-2
1 Identification number	A500-7-2
2 Title	and a state of the
3 Scale of several and any factor	r anna clin cuina an ano -16 -
4 Prepared date	-6
19- Survey report	A210-2
1 Identification number	A600-6-2
2 Title	
3 Prepared date	1 −5 αταγιατικής Εκληδικής Α
	- 1997年1月1日(1997年1月) 1997年1日 - 1997年1日(1997年1日)
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	METHOD A0-3 GEOL	OGICAL ANALYSIS	
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			antaria (1244), antaria Antaria (1244) Antaria (1244)
Assign	ment Parameter		
· -	· Area name		n de la companya de l Na companya de la comp
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.	· Kind of Analysis	e de la sector de la construcción d Presentador de la construcción de la	
-	- Analysis name (code)	i se izro en	الم من المراجع مع مع مع المراجع الجوي
: +	- Period		
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Sorti	ng Parameter	n i na state a state a The state a stat	
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Condi	tions of Changing Page		
	- Proceeding to the next a	analysis code	
Outpu	t Item 🖉	_ 12 °	neter jaeren bir en 19
·		e se	
Nó.	Item name	Unit	Itém number
	Analysis name		A300-1
	Kind of analysis		-2
	Area name		-3
	Sample source		-5
	Analysis report		,
	Identification number		-6
	Title		-7
	Author		-8
	Company name		-10
8	Location of laboratory		-10 A310-1
9	Sample identification		-2
10	Field name		-2
11	Well name Formation name		-4
12			-4
13	Kind of sample		-6
14	Sampling locality		-8
15	Analysis period		~0

-

16	Kind of analysis	s performed		A311-1	
17	Numbér of sample	e		-2	<u>×</u>
18-	Unit cost			-3	
1	U.S.\$		[U.S.\$.]	-1	
2	Rp		[Rp]		
19-	Total cost			A300-11	
1	U.S.\$		(U.S.\$.)	-1	
2	Rp		[Rp]	-2 	
20-	Chart and Figur	e prepared		· · · · · · · · · · · · · · · · · · ·	
	by survey			A320-1 and	12
1	Identification			A500-7-2	÷
Ź	Title			en el Mérel en Mitt -1	
3	Scale				òr 1
4	Prepared date	•		- 6 - 1 - 1	(et st.) e
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METHOD A0-4 PROSPECT INFORMATION

		1	÷	•	÷.
Assignment Parameter			· .	e de esta	÷ .
					1.11
- Area name					
- Prospect name				- 11	
- Type of trap					
- Period					
r cr rou				- 	
Sorting Parameter		a April State and State			
	· · ·			te e pe	
Conditions of Changin	ng Page	the second second	a sa		t
- Proceeding to	thẻ next p	rospect code		e Ar	1
- · · · · · ·	-				

Output Item

No.	Item name	Unit	Item number
1	Prospect name (code)		A400-1
2	Area name		-2
3	Prospect name		-3
4	Well name		-4
5	Registered date as prospect		-8
6	Formation name		A410-1
7	Type of trap		-2
8	Number of layers		-3
9	Size of areal closure	(km ²)	4
10	Reight of vertical closure	(m)	-5
11	Net pay thickness	(m)	-6
12-	Estimated reservoir rock		
	volume		-7
	l Gas	(m ³ /km ² .m)	-1
	2 0i1	[m ³ /km ² .m]	-2
13-	Index productivity		8
	l Gas	[m ³ /km ² .m]	-1
	2 011	[m ³ /km ² .m]	-2

14-	Initial hydrocarbon in	
	place	A410 -9
	l Gás	[std m ³] -1
	2 011	[std m ³] -2
15	Recovery factor	(%) ~10
16-	Recoverable hydrocarbons	
	in place	
	1 Gas	[std m ³] -1
	2 011	[std m ³] -2
17	Chance factor	(%) ~12
18-	Risk reduced recoverable	
	hydrocarbons in place	-13
	l Gas	(std m ³) -1
	2 Oil	[std m] -2
19-	Seismic interpretation	e, des terreres en pellent, la comp
	report référence	A400-5
	1 Title	B112-2
	2 Identification number	-1
2Ô-	Map reference	A400-6
	1 Title	A500-7-1
	2 Identification number	-2
21-	Prospect and lead report	
	reference	A400-7
	1 Title	A600-7-1
	2 Identification	
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		1998년 1월 1998년 1월 1998년 1999년 1999년 1997년 1997

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	METHOD A0-5 MAP AND F	IGURE INFORMATION	1997 1997 - 1997 1997 - 1997
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	· · · · ·	and the second	÷
Assig	iment Parameter		
	- Area name		
· ·	- Field name		, .
	- Kind of map and figure	and a start of the second s Second second	
	- Formation or layer hame	の方式です。 しょうごう しょうしょう かんしょう ひかい 一手 1000年間 1月1日 - 1000日 -	
	- Point coordinate (in case	e of map)	•
	- Scale (in case of map)		
	- Period		1
		n an	÷.,
Sorti	ng Paraméter	and a second second Second second	
Condi	tions of Changing Page		
- :·	- According to assignment		
	n na harrina da serie	 An and a state of the state of	
Òutov	it Item		
No.	Item name	Unit Item num	bèr
1	Map name (codé)	A500-1	
2	Kind of map	na serie a serie d'archet de la de la serie de la s −2	
3	Province name		
4	Area name		
5	Field or prospect name		
6	Prepared or revised date		
7-	Map Identification	-7	
	1 Title	-1	1
	2 Identification number	-2	?
8	Author	-8	
9	Company name	-9	
10	Drawing number	-10	
-	-		

AI - 24

11	Micrófilm number	A500-11
12	Map sheet size	-12
13	Scale	-15
14	Contour interval	-16
15-	Coordinates of map limit	-17
	1 Latigude [deg) (min) (sec) -1
	2 Longitude [deg) (min) (sec) -2
16	Well name	A510-2
17	Formátion name or layer name	- <u>1</u>
18-	Identification of report	A500-14
	1 Title	A600- 7-1
•	2 Identification number	-2
19	Storage number	A500-13
	In case of cross-section	
13	Line name	A500-15
14-	Scale	~16
	1 Vertical scale	-1
	2 Horizontal scale	-2
15	Number of well	-17
16	Well name	A510-2
17	Pormation name or layer name	A520-1
18-	Identification name or layer	name A500-14
	l Title	A600-7-1
	2 Identification number	-2
19	Storage number	A500-13
	In case of chart	
13	Means of chart	A500-15
14-	Scale	-16
	1 Vertical scale	-1
	2 Horizontal scale	-2
15	Well name	A510-2
16	Formation name	A520-1
17-	Identification of report	A500-14
	l Title	A600- 7-1

8	Storage numb	er	A500-13	• ·
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METHOD A0-6 REPORT INFORMATION

Assignment Parameter

- Aréa náme
- Kind of report
- Period

Sorting Parameter

- Reference number

Condition of Changing Page

- According to the assignment parameter

Output Item

No.	Item name	Unit	Item number
1	Réport name (code)		A600-1
2	Kind of report		-2
3	Area name		-3
4	Field name		-4
5	Prepared date	· · · ·	-5
6-	Identification number		-6
	1 Title		-1
	2 Identification number		-2
7	Author		-7
8	Company name		-8
9-	Reference number of map		
	and figure		A610-2
	l Title		A500-7-1
	2 Identification number		-2
	3 Scale		A500-15 or 16
10	Storage number		A600-9

2 B-GEOPHYSICAL DATA INFORMATION

	n de la companya de l La companya de la comp		Page
·- · /			rage
B0-1 -		- Seismic Survey	ÁI – 35
	<u></u>	~ Field Operation	AI - 36
	<u></u>	- Data Processing	AI - 4(
	<u>B0-13</u>	- Interpretation	AI – 43
L	BO-14	- Interpretation Map	AI - 4 !
<u> </u>		- Magnetic Survey	AI – 4
tast per t		- Field Operation	AI – 4
		- Data Processing	AI – 5:
	<u>B0-23</u>	- Interpretation	A1 - 5
· •	B0-24	- Interpretation Map	AI – 5
<u> </u>		- Gravity Survey	AI – 5
	B0-31	- Field Operation	AI – 5
	B0-32	- Data Processing	AI – 6
	B0-33	- Interpretation	AI - 6
. L	B0-34	- Interpretation Map	AI 6
B0-4		- Well Velocity Survey	A1 6
B0-5		- Special Study	AI – 6

2-1 Diagram Index of Output Reporting Method

AI - 31

B1		Geophysical Survey List by Year
B2		Geophysical Survey List by Area
B3		Summary of Geophysical Data Processing
₿ 4	الحاجة ما يكرما ألا أنه تها يكرمن من عن المرجع من عا	Summary of Geophysical Interpréta- tion & Special Study
B5		List of Report
B6		List of Map
B7		List of Magnetic Tape
B8		Summary of Unit Cost
B9		Survey Method for Seismic Survey
B10		Total Length for Field Operation
B11]		Total Fuel
B12]		- Total Explosive
B13		- Total Survey Cost by Area
B14		- Total Survey Cost by Year

. . .

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2-2 Conceptual Specification of Output Reporting Method

METHOD BO-1 SEISMIC SURVEY

Assignment Parameter

- Area name
- Field or prospect name
- Method of survey
- Survey name
- Period

Sorting Parameter

Conditions of Changing Page

- Proceeding to the next survey code or next survey procedure

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Output Item

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Data items for this method consist of;

- Items in METHOD B0-11 (Page AI-27)
- Items in METHOD B0-12 (Page AI-31)
- Items in METHOD B0-13 (Page AI-34)
 - and

- Items in METHOD B0-14 (Page A1-36)

However, consideration would be taken to avoid improper repetition of data item.

Remarks

2.1

METHOD B0-11 FIELD OPERATION

Assignment Parameter

- Area name
- Field or prospect name
- Method of survey
- Survey name
- Period

Sorting Parameter

Conditions of Changing Page

- Proceeding to the next survey code

-

Output Item

No.	Item name	Unit	Item number
1	Unit name	• • • • • • • • • • • • • • • • • • •	
2	Area name		B100-2
3	Field or prospect name		B150-1
4	Kind of survey		B100-4
5	Method of survey		-5
6	Survey name		-1
7	Survey name		-6
8	Period		B110-1
9	Name of organization		-3
10-	Contract		-2
1	Date		-1
2	Identification		-2
11	Site description		-5
12	Total length recorded	[Km]	-6
13	Total stations recorded		-7
14	Total line cutting	(Km)	-8

5	Total bridging	[Km] B110-9
16	Total land survey	-10
17-	Hélicopter	, sato tra a ta -11
1	Total flying hours	[hours] -1
2	No. of helipad	,
<u> </u>	Name of helibase station	
2 - 4	Type of helicopter	, statistic statistic statistica t atistica statistica statistica statistica statistica statistica statistica st
18-	Total fuel	-12
1	Total gasoline	':{ litër }
2	Total diesel dil	(liter) -2
- 3	Total kerosene	(liter) -3
4	Total aviation turbine fuel	
5	Total lubricant	-5 (kġ)5
··· 6	Total grease	(kġ)6
19-	Average manpower	-13
1	Bxpatriate	on the state of the state of -1 .
2	Local staff	-2
3 1	Labor	-3
20-	Total explosive	-14
1	Total primer	(1bs) -1
2	Total detonator	(pcs) -2
38	Totál main chárge	(1bs) ~3
21-	Drilling	un an Anna 11 an 11 -15
1	Tótal holes drilled	entroff en la service <mark>=1</mark>
2	Total depth drilled	[m] -2
22-	Survey method	-16
1	Name of recording instrument	- 1
^è 2	Recording system	-2
3	Récording filter	-3
4 (Sampling rate	(mšeč) -4
5	Name of detector	-5
6	Length	(m) -6
7	Offset	(m) and a second -7
8	Group interval	(m) -8
9	Geophone interval	

No.	Item name	Unit Item number
22-10	No. of groups	B110-16-10
11	No. of geophone per group	- 11
12	Source of energy	-12
13	No. of holes per shot	-13
14	Charge per hole	ja substance Provident of -14
15	Hole's separation	
16	Average charge depth	edu (m) €euro Beeuro ano -16
17	Shooting pattern	€ 1948 ⁻ 1968 - -17
18	Distance between stations	[m] , a many many set $m = 18$
.19	No. of fold for recording	³ (%) supplies that have a final field of −19.
20	Line interval	- 20
21	Positioning method	o nghulan gulga tang sa _{kan} sa s a
22	Field test date	
23	Field test location	-23
23-	Location map	B111
<u> </u>	Identification of map	tan
2	Title	ta gen ⊈a real -3 a
3	Date	α τη τ <mark>α φ. − 4</mark> γ
4 :	Scale	
5	Microfilm number	-6
6	Author	- , , , , , , , , , , , , , , , , −7 .
7	Name of organization	
8	Identification of report	9
24-	Magnetic tape	1. B110-4
1	Tape number & supporting da	ita kan di diga davita 📶
2	Type of magnetic tape	- -2 . j
: 3	Quality	
4	Storage place	(1,1,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2
25-	Report	B112
. 1	Identification of report	- 1 2
2	Title	- -2 -
3	Date	10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10
. 4	Storage number	
5	Author	au en avegaget er envissav −5 a
6	Name of organization	nan e nazi naniti na tin ∼6

26	Operation cost	Ê	13
1	Date		
2*	Survey length per year		-2
3*	No. of stations per year		-3
4*	Operation cost per year	[U.S.\$]	-4-1
5*	Operation cost per year	[Rp.]	-2
6*	Mánpower cost for expatriate per yéar	(U.S.\$)	-5-1
7*	Manpower cost for expatriate per year	[Rp.]	
8*	Manpower cost for local staff per year	[U.S.\$]	-6-1
9*	Manpower cost for local staff per year	(Rp.)	-2
10*	Manpower cost for labor per year	[U.S.\$]	-7-1
11*	Manpower cost for labor per year	[Rp.]	-2
12	Operation cost per Km	[U.S.\$]	· · · · · · · · · · · · · · · · · · ·
13	Operation cost per Km	[Ŕp;]. fatus	
14	Operation cost per station	[U.S.\$]	2 1
15	Operation cost per station	n e e [Rpi] e di≊ Inc	
the second			
10 m	*Hereinafter, these items are a	repeated on the	
	following basis respectively,	a ngadita.	
÷.,	- survey		
Remar		an a	
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		<u>en status de la socia</u> tion	

METHOD B0-12 DATA PROCESSING

		• • •
Assignment Parameter		
- Area name	$\mathcal{F}_{i} = \{ i \in \mathcal{F}_{i} : i \in \mathcal{F}_{i} : i \in \mathcal{F}_{i} : i \in \mathcal{F}_{i} : i \in \mathcal{F}_{i} \} $	
- Field or prospect name	(1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,	
- Method of survey		
- Survey name	$(1,1,2,\dots,n_{n-1}) \in \mathbb{R}^{n-1}$	
- Period	an a	
Sorting Parameter	an a	
Conditions of Changing Page	an an Araban an Araba Araban an Araban an Ar	

- Proceeding to the next survey code or next number of time

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Output Item

-

No.	Item name	Unit Item number
1	Unit name	n an
2	Area name	B100-2
3	Field or prospect name	B150 ⁴ 1
4	Kind of survey	B100-4
5	Method of survey	
6	Survey name	un en structurente service -1 - 1
7	Survey name	1, 200 € 14 ° an an an an 6
8	Period	B120-2
9	Name of organization	~ 4
10	No. of times	-1
11-	Order document	-3
1	Date	- 1
2	Identification	-2
12-	Processing method	-6

No.		Unit	Item number
12-1	No. of fold for recording	[%]	B120-6-1
2	No. of fold for processing	[%]	-2
. 3	Sampling rate for processing	[msec]	- 3
4	Kind of section		-4
5	Application of deconvolution		-5
6	Additional processing sequence		-6
13-	Line number and station number		B121-1
14-	Magnetic tape		B120-5
1	Tape number & supporting data		-1
2	Type of magnetic tape		-2
3	Quality		-3
4	Storage place		- 4
15-	Report		B122
1	Identification of report		-1
2	Title		-2
3	Date		-3
- 4	Storage number		-4
5	Author		-5
6	Name of organization	· .	-6
16-	Processing cost		B123
1	Date		-1
2*	Processed length per year	[Km]	2
3*.	No. of stations processed per year		-3
4*	Processing cost per year	[U.S.\$]	-4-1
5*	Processing cost per year	[Rp.]	-2
6	Processing cost per Km	{U.S.\$}	
7	Processing cost per Km	[Rp.]	
. 8	Processing cost per station	[U.S.\$]	
9	Processing cost per station	[Rp.]	
	•		

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$\hat{\mathcal{L}} = \{\hat{\boldsymbol{\mu}}^{(1)}, \hat{\boldsymbol{\mu}}^{(2)}\}$				
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$(e^{i t}) \in \mathbb{R}^{n}$				÷
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		a star in the second		
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	<u>i</u> - 14	and the second	-	
÷ .		and a second second Second second	• •	
	. *	$1 \leq \delta \leq \frac{1}{2} \leq \frac{1}{2$		•
		and the second	2.8	
	·			
	- ··	$(1,2,\ldots,n_{n-1}) \neq (1,2,\ldots,n_{n-1})$		
		$(x_1,y_2,\dots,y_{n-1}) \in \{x_1,\dots,x_{n-1},\dots,x_{n-1}\}$, si	
		$\{1, \dots, n\} = \{1, \dots, n\} \in \{1, \dots, n\} \in \{1, \dots, n\}$		
				•

AI - 42

$(1,2,\ldots,2,2,\ldots,2,2,\ldots,2,2,\ldots,2,2,\ldots,2,2,\ldots,2,2,\ldots,2,2,\ldots,2,2,\ldots,2,2,\ldots,2,2,\ldots,2,2,\ldots,2,2,\ldots,2,2,\ldots,2,2,\ldots,2,2,\ldots,2,2,\ldots,2,\ldots,2,2,\ldots,2,2,\ldots,2,2,2,\ldots,2,2,2,\ldots,2,2,2,\ldots,2,2,2,\ldots,2$	METHOD B0-13	INTERPRETATION	· •
	the states		
Assignment Para	ameter		
- Area na	ne		
- Field of	r prospect name	and the during the second	
- Method (of survey		
- Survey	name, 1	 The standard scattered by gate 	
- Period		and the latence of the second	*.,
		en e	
Sorting Parame	<u>tér</u>		
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Conditions of	Changing Page	and the second	

- Proceeding to the next survey code or next number of time

Output Item

No. Item name Unit Item number -----1 Unit name Area name 2 B100-2 3 Field or prospect name B150-1 Kind of survey 4 B100-4 5 Method of survey -5 Survey name 6. -1 7 Survey name -6 Period 8 B130-2 Author <u>9</u> -4 Name of Organization 10 -5 11 No. of times -1 12-Contract -3 1 Date . -1 2 Identification -2 13-Report B133 1 Identification of report -1 2 Title -2

No.	Item name	Unit I	tem number
13-3	Date		B133-3
4	Storage number	(*************************************	-4
5	Author	·	-5
6	Name of organization		-6
14-	Interpretation cost		· · · ·
1	Total length interpreted	[Km]	B130-6
2	Total stations interpreted	· :	n te gette -7
3	Total interpretation cost	[U.S.\$]	-8-1
4	Total interpretation cost	[Rp.]	-2
5	Interpretation cost per Km	[U.S.\$]	
6	Interpretation cost per Km	[Rp.]	
7	Interpretation cost per station	[U.S.\$]	
8	Interpretation cost per station	[Rp.]	

Remarks

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AI - 44

METHOD BO-14 INTERPRETATION MAP

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Assignment Parameter

- Area name
- Field or prospect name
- Method of survey Survey name

- Period

Sorting Parameter

Conditions of Changing Page

- Proceeding to the next kind of map

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Output Item

No.	Item name	Unit	Item number
1	Únit námé		
2	Area name		B100-2
3	Field or prospect name		B150-1
4	Kind of survey		B100-4
5	Method of survey		-5
6	Survey name		-1
7	Survey name		-6
8	Period		B130-2
9	No. of times		-1
10	Kind of map		B132-2
10	Identification of map		-1
	Title		-3
12	5. Contract of the second s		- 4
13	Date		-5
14	Migrated or unmigrated		-6
15-	Horizon name		-)
1	Horizon name		-
2	Formation name		-2

No.	Item name	Unit	Item number	
16	Contour interval		B132-7	
17	Scale	÷ 1	-8	
18	Microfilm number		-9	
19	Author		- 10	
20	Name of organization		-11	,
21	Identification of report		-12	
			e esta de la companya	

Remarks

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$(1,1) \in \mathbb{R}^{n}$				
1 4 1 4 1				
:			$\frac{1}{2} \left[\left(\frac{1}{2} - \frac{1}{2} \right) + \left(\frac{1}{2} - \frac{1}{2} \right) \right] \left(\frac{1}{2} - \frac{1}{2} \right) \right]$	
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METHOD BO-2 MAGNETIC SURVEY

Assignment Parameter

- Area name
- Field or prospect name
- Survey name
- Period

Sorting Parameter

Conditions of Changing Page

- Proceeding to the next survey code or next survey procedure

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Output Item

Data items for this method consist of;		
- Items in METHOD B0-21 (Page AI-39)	n position de la composition d	i s e f
- Thoma in NETHOD BO-22 (Dave AT-42)	in an an ann ann ann ann ann ann ann ann	
- Items in METHOD B0-23 (Page A1-44) and		·
- Items in METHOD B0-24 (Page AI-46)		
However, consideration would be taken to a	woid impr	oper

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repetition of data item.

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Remarks

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METHOD B0-21 FIELD OPERATION

signine	nt Parameter	·	•
- A	rea name		·
- F	ield or prospect name	e and so an an an	. :
	urvey name		
- P	eriod		···[····
rting	Parameter		
nditio	ons of Changing Page	e de la composición d	
nisi ≞ i p	roceeding to the next survey co	dé	
tput_1	Item		
		an Antonio generativa Antonio generativa	
NO.	Item name		
1	Unit name		
-			1 hi ha a
2	Area name		8100~2
		-	DIGO 1
2	Field or prospect name Kind of survey	et ese traja de la composition de la compo ese traja de la composition de la compo	B150-1 B100-4
2 3	Field or prospect name	et ese traja de la composition de la compo ese traja de la composition de la compo	B150-1 B100-4
2 3 4	Field or prospect name Kind of survey Survey name	et ese traja de la composition de la compo ese traja de la composition de la compo	B150-1 B100-4 -1
2 3 4 5	Field or prospect name Kind of survey Survey name	et es d _e la tradición de la esecono de la tradición	B150-1 B100-4 -1
2 3 4 5 6	Field or prospect name Kind of survey Survey name Survey name	et es d _e la tradición de la eseconomica de la tradición	B150-1 B100-4 -1 -6
2 3 4 5 6 7	Field or prospect name Kind of survey Survey name Survey name Period	et es d _e la tradición de la eseconomica de la tradición	B150-1 B100-4 -1 -6 B110-1
2 3 4 5 6 7 8	Field or prospect name Kind of survey Survey name Survey name Period Name of organization	et es d _e la tradición de la eseconomica de la tradición	B150-1 B100-4 -1 -6 B110-1 -3
2 3 4 5 6 7 8 9-	Field or prospect name Kind of survey Survey name Survey name Period Name of organization Contract	et es d _e la tradición de la eseconomica de la tradición	B150-1 B100-4 -1 -6 B110-1 -3 -2
2 3 4 5 6 7 8 9- 1	Field or prospect name Kind of survey Survey name Survey name Period Name of organization Contract Date	et es d _e la tradición de la eseconomica de la tradición	B150-1 B100-4 -1 -6 B110-1 -3 -2 -1
2 3 4 5 6 7 8 9- 1 2	Field or prospect name Kind of survey Survey name Survey name Period Name of organization Contract Date Identification	et es d _e la tradición de la eseconomica de la tradición	B150-1 B100-4 -1 -6 B110-1 -3 -2 -1 -2
2 3 4 5 6 7 8 9- 1 2 10	Field or prospect name Kind of survey Survey name Survey name Period Name of organization Contract Date Identification Site description	ti escilit (1 − 1 − 1 − 1 − 1 − 1 − 1 − 1 − 1 − 1	B150-1 B100-4 -1 -6 B110-1 -3 -2 -1 -2 -1 -2 -5
2 3 4 5 6 7 8 9- 1 2 10 11 12	Field or prospect name Kind of survey Survey name Survey name Period Name of organization Contract Date Identification Site description Total length recorded Total stations recorded	ti escilit (1 − 1 − 1 − 1 − 1 − 1 − 1 − 1 − 1 − 1	B150-1 B100-4 -1 -6 B110-1 -3 -2 -1 -2 -5 -6
2 3 4 5 6 7 8 9- 1 2 10 11 12 13	Field or prospect name Kind of survey Survey name Survey name Period Name of organization Contract Date Identification Site description Total length recorded Total stations recorded Total line cutting	ت مربق میں میں میں میں اور	B150-1 B100-4 -1 -6 B110-1 -3 -2 -1 -2 -5 -6 -7
2 3 4 5 6 7 8 9- 1 2 10 11 12	Field or prospect name Kind of survey Survey name Survey name Period Name of organization Contract Date Identification Site description Total length recorded Total stations recorded	(Km)	B150-1 B100-4 -1 -6 B110-1 -3 -2 -1 -2 -5 -6 -7 -8

lo	Item name	Unit	Item number
6-	Helicopter		B110-11
1	Total flying hours	[hours]	- 1
2	No. of helipad		-2
3	Name of helibase station	na gora de las	- 3
4	Type of helicopter		-4
L 7 -	Total fuel	÷: .	-12
; 1	Total gasoline	[liter]	<u></u>
2	Total diesel oil	[liter]	-2
.≤ 3	Total kerosene	[liter]	ara, % −3
.4	Total aviation turbine fuel	[liter]	- 4
5	Total lubricant	(litér)	
÷ 6	Total grease	[kg]	-6
18-	Average manpower		-13
1	Expàtriate		- 1
:2	Local staff	· · · ·	
3	Labor		-3
19-	Survey méthod	en de la servición de la	-16
1	Airborne or land		-1
2	Apploximate surveyed area size	e [Km ²]	-2
3	Line interval	an an go taisan an	-3
4	Plight high	. [m] €.	<u>18 19 19 19 19 19 19 19 19 19 19 19 19 19 </u>
5	Distance between stations	, e ve j (m) e j e	stration, station *−5
6	Name of magnetometer	a a sector cur	-6
7			
8	Name of magnetomèter		-8
9	Accuracy of magnetometer	· . · · · .	-9
10	Recording system		-10
11	Sampling rate		
12	Name of recording instrument		-12
13	Positioning method		-13
20-	Location map	aga≸ ang bang bang bang bang bang bang bang	B111
i	Identification of map		-1
2	Title (1997)		-3
3	Date		→4

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No.	Item hame see	Unit Item number
20-4	Scale	
5	Microfilm number	. A second to the first -6
6	Author	2000 - Dong tanah sa sa sa s 17
. 7	Name of organization	28 - 28
: 8	Identification of report	−9
21-	Magnetic tape	B110-4
1	Tape number & supporting data	in de la constant de
2	Type of magnetic tape	, we also that the formula $-\frac{1}{2}$
2 ·3 ·	Quality	911. 18 91. (* 1991) * 43 .
- 4	Storage place	and see that the second second 🖓
22-	Report	B112
1	Identification of report	and the second
2	Title	ανατό <u>τ</u> ο το το βοποιογίο −2 ^{το}
- 3_	Date	+3
. 4	Storage number	10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -
5 - 5	Author	- 5
6	Name of organization	1. 11. 11. 11. 11. 12. 12. 11. −6 1. 1
23-	Operation cost	B113
1	Date	111 19 - Alia State - Alia - 1
2*	Survey length per year	a a brita (bd1), ⊷2 s
3*	No. of stations per year	
4*	Operation cost per year	[U.S.\$] -4-1
· 5*	Operation cost per year	[Rp.] -2
6*	Manpower cost for expatriate per year	•
7*	Manpower cost for expatriate per year	[Rp4] -2
8*	Manpower cost for local staff pe year	er (U.S.\$) -6-1
9*	Manpower cost for local staff pe year	rrad (Rpi) a dat a ant - 42 -
10*	Manpower cost for labor per year	
11*	Manpower cost for labor per year	[Rp.] -2
12	Operation cost per Km	[U.S.\$]
13	Operation cost per Km	(Rp)

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No.	Item name	Unit	Item number
	Operation cost per station Operation cost per station	[U.S.\$] [Rp.]	

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*Hereinafter, these items are repeated on the following basis respectively, - survey

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MEHTOD B0-22 DATA PROCESSING

Assignment Parameter

- Area name
- Field or Prospect name

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- A state of the second state - Survey name
- Period

Sorting Parameter

Conditions of Changing Page

- Proceeding to the next survey code or next number of time

Output Item

No.	Item name	Unit	Item number
1	Unit name		
2	Area name		B100-2
3	Field or prospect name		B150-1
4	Kind of survey		B100-4
5	Survey name		-1
6	Survey name		-6
7	Period		B120-2
8	Name of organization		- 4
9	No. of times		-1
10-	Order document		-3
· 1	Date		-1
2	Identification		-2
11-	Processing method		-6
1	Sampling rate for processing		<u>-</u> 1 · · · ·
2	I.G.R.P. used correction	· .	-2
3	Filtration		-3

No.	Item name	Unit	Item number
12	Line number and station number	èr	B121-1
13	Magnetic tape	-	B120-5
1	Tape number & supporting data	a a	-1
2	Type of magnetic tape	-	-2
3	Quality		-3
4	Storage place		-4
14-	Réport		B122
1	Identification of report		 1
2	Title		-2
3	Date	en le serre	
4 .	Storage number		- 4
5	Author		-5
6	Name of organization		-6
15-	Processing cost		B123
15 ∌r ì .			-1
2*	Processed length per year	[km]	-2
	No. of stations processed per year	· -	-3
4*	Processing cost per year	(U.S.\$)	-4-1
	Processing cost per year	[Rp.]	-2
6	Processing cost per km	[U.S.\$]	
7	Processing cost per km	[Rp.]	
	Processing cost per station	[U.S.\$]	
9	Processing cost per station	[Rp.]	
	* Hereinafter, these items an		t on the
	following basis respective]	L y ,	
-	~ survey		· .
Remark	6		
Nemal X	$\frac{2}{2}$ and $\frac{2}{2}$		
· -			
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METHOD B0-23 INTERPRETATION

Assignment Parameter - Area name - Field or prospect name - Survey name - Period <u>Sorting Parameter</u>

Conditions of Changing Page

- Proceeding to the next survey code or next number of time

Output Item

		1.1	
No.	Item name	Unit	Item number
	·		
1	Unit name	• • • • •	
2	Area name		B100-2
3	Field or prospect name	general de la composition de la composi La composition de la c	B150-1
4	Kind of survey		B100-4
5	Survey name	a di seri di s	an un u € que <u>n</u> - A -1
6	Survey name	4 - <u>1</u> - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	
7	Period	ta ja ¹ a ₹	B130-2
8	Author	, t	4 a sin 1 4 a ferrar a
9	Name of organization		-5
10	No. of times		
11-	Contract	. Roselij.	
1	Date		- 1
2	Identification		-2
12-	Report		B133
1	Identification of report		-1
2	Title		-2
3	Date		-3
4	Storage number		-4
5	Author		~ 5

No.	Item name	Unit	Item number
12-6	Name of organization	. ⁴	B133-6
13- 1	Interpretation cost Total length interpreted	[km]	B130-6
2	Total stations interpreted Total interpretation cost	{U.S.\$}	-7 -8-1
3 4	Total interpretation cost	[Rp.]	-2
5 6	Interpretation cost per km Interpretation cost per km	(U.S.\$) (Rp.)	
7	Interpretation cost per station Interpretation cost per station	[U.S.\$] [Rp.]	

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Remarks

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AI -- 55

METHOD B0-24 INTERPRETATION MAP

Assignment Parameter		
- Area name	$(x_{1}, \dots, x_{n}) \in \mathbb{R}^{n} \times \mathbb{R}^{n}$	• <u>•</u>
- Field or prospect name	$(a_1, \dots, a_n) \in U_{n-1} \cap (a_1, \dots, a_n) \cap (a_n, \dots, a_n)$,
~ Survey name	$(\phi_{i},\phi_{i}) = (\phi_{i},\phi_{i}) = (\phi_{i},\phi_{i}$	5
- Períod	$(1+i)_{i\in \mathbb{N}} = (1+i)_{i\in $	•
	n taan in ¹⁹ 79 ahay ka ar Ankart	i.
Sorting Parameter	(1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,	
0020-002	e de la constant de la parte de la c	,
Conditions of Changing Page	· · · · · · · · · · · · · · · · · · ·	;
- Proceeding to the next	kind of map	

Output_Item

Nó.	Item name	Item number
1	Unit name	
2	Area name	B100-2
3	Field or prospect name	B150-1
4	Kind of survey	B100-4
5	Survey name	-1
6	Survey name	-6
7	Period	B130-2
8	No. of times	-1
9	Kind of map	B132-2
10	Identification of map	-1
11	Title	-3
12	Date	-4
13	Contour interval	-7
14	Scale	-8
15	Nicrofilm number	-9
16	Author	-10
17	Name of organization	-11
18	Identification of report	-12

Remarks

METHOD BO-3 GRAVITY SURVEY

Assignment Parameter

- Area name
- Field or prospect name
- Survey name
- Period

Sorting Parameter

Conditions of Changing Page

~ Proceeding to the next survey code or next survey procedure

Output Item

Data items for this method consist of;

Items in METHOD BO-31 (Page AI-49)
Items in METHOD BO-32 (Page AI-52)
Items in METHOD BO-33 (Page AI-54) and

- Items in METHOD BO-34 (Page AI-56)

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However, consideration would be taken to avoid improper repetition of data item.

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Remarks

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METHOD B0-31 FIELD OPERATION

Assignment Parameter - Area name - Field or prospect name - Survey name - Period Sorting Parameter

Conditions of changing page

- Proceeding to the next survey code

-

Output Item

No.	Item name	Unit	Item number
1	Unit name	an a	
2	Area name		B100-2
3	Field or prospect name		B150-1
4	Kind of survey		B100-4
5	Survey name		-1
6	Survey name	an a	•
7	Period		B110-1
8	Name of organization		-3
9-	Contract		-2
1	Date		-1
2	Identification		-2
10	Site description		-5
11	Total length recorded	[Km]	-6
12	Total stations recorded		-7
13	Total line cutting	[Km]	-8
14	Total bridging	[K m]	-9
15	Total land survey	[Km]	-10

• .

No.	Item name	Unit	Item number
16-	Helicopter		B110-11
1.	Total flying hours	[hours]	-1
2	No. of helipad		-2
3	Name of helibase station		-3
.4	Type of helicopter	. · · ·	-4
17-	Total fuel		-12
1	Total gasoline	[liter]	-1
2	Total diesel oil	[liter]	-2
3	Total kerosené	[liter]	-3
4 💡	Total aviation turbine fuel	[liter]	-4
5	Total lubricant	[liter]	-5
6	Total grease	[kg]	-6
18-	Average manpower		-13
1 -	Expatriate		-1
2	Local staff	· · · · ·	-2
3	Labor		-3
19- E	Survey method		-16
1 :	Approximaté surveyed area size	[km ²]	- 1
2	Line interval		-2
3	Distance between stations	[m]	-3
4	Name of gravimeter		-4
5	Accuracy of gravimeter	· · · · · · · ·	-5
6	Recording system		-6
7	Name of recording instrument	· · ·	-7
. 8	Positioning method	the second second	8
. 9	No. of samples		-9
10	Description		-10
20-	Location map	· · · · · · · · · · · · · · · · · · ·	B111
1	Identification of map		-1
2	Title state		-3
3	Date		-4
4	Scale		-5
5	Microfilm number	а. так стана с Стана стана стан Стана стана стан	-6

No.	Item name	Unit	Item number
20-6	Author		B111-7
7	Name of organization	÷	-8
8	Identification of report		-9
21-	Magnetic tape		B110-4
1	Tape number & supporting data	÷ .	-1
2	Type of magnetic tape	· .	-2
3	Quality	. •	-3
4	Storage place	•	-4
22-	Report	· · · ·	B112
1	Identification of report		-1
2	Title	1997 - 19	-2
° 3	Date		-3
4	Storage number		-4
5	Author	$\mu = d^{2} \mu$	-5
6	Name of organization	•	-6
23-	Operation cost		B113
1 '	Date		····· · -1 ····*
2*	Survey length per year	· · ·	-2
3*	No. of stations per year		-3
4*	Operation cost per year	[U.S.\$]	-4-1
5*	Operation cost per year	[Rp.]	-2
6*	Manpower cost for expatriate per year	[U.S.\$]	-5-1
7*	Manpower cost for expatriate per year	[Rp.]	-2
8*	Manpower cost for local staff per year	[U. \$;\$];	-6-1
9*	Manpower cost for local staff per year	[Rp.]	- - 2
10*	Manpower cost for labor per year	[U.S.\$]	-7-1
11*	Manpower cost for labor per year	[Rp.]	- 6 € 89 - <mark>- 2</mark> 2006 €
12	Operation cost per km	[U,Ś.\$]	
13	Operation cost per km	[Rp.]	

No.	ltem name	Unit	Item number
	Operation cost per station Operation cost per station	(U.S.\$) {Rp.}	

* Hereinafter, these items are repeated on the following basis respectively,
- survey

Remarks

Assignment Parameter

- Area name
- Field or prospect name
- Survey name Period
- Period

Sorting Parameter

Conditions of changing page

- Proceeding to the next survey code or next number of time

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Output Item

No.	Item name	Unit	Item number
1	Unit name		
2	Area name		B100-2
3	Field or prospect name		B150-1
4	Kind of survey		B100-4
5	Survey name		-1
6	Survey name		-6
7	Period		B120-2
8	Name of organization		-4
9	No. of times		-1
10-	Order document		-3
. 1	Date		-1
2	Identification		-2
11-	Processing method		-6
1	Rock density	[g/cm ³]	-1
2	Filtration		-2
12	Line number and station number	c	B121-1
13-	Magnetic tape		B120-5
1	Tape number & supporting data		-1
2	Type of magnetic tape		-2

13-3	Quality		B120-5-3
4	Storage place		-4
14-	Report		B122
1	Identification of report		- 1
2	Title		-2
3	Date		
4	Störage number		-4
5	Author		-5
6	Name of organization		-6
15-	Processing cost		B123
1	Date		- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
2	Processed length per year	[km]	-2
3	No. of stations processed per		-3
4:	year Processing cost per year	[V.S.\$]	-4-1
5	Processing cost per year	[Rp.]	-2
Ğ	Processing cost per km	[U.S.\$]	· · ·
7	Processing cost per km	[Rp.]	
- 8	Processing cost per station	[V.S.\$]	· ·
ģ	Processing cost per station	[Rp.]	

* Hereinafter, these items are repeated on the following basis respectively,

- Survey

Remarks

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ar T METHOD B0-33 INTERPRETATION

<u>Assignment Parameter</u> - Area name

- Field or prospect name
- Survey name
- Period

Sorting Parameter

Conditions of Changing Page

- Proceeding to the next survey code or next number of time

-

Output Item

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No.	Item name	Unit Item number
1	Unit name	
2	Area name	B100-2
3	Field or prospect name	B150-1
4	Kind of survey	B100-4
5	Survey name	-1
6	Survey name	-6
7	Period	B130-2
8	Author	
9	Name of organization	-5
10	No. of times	-1
11 -	Contract	-3
1	Date	-1
2	Identification	-2
12-	Report	B133
1	Identification of report	-1
2	Title	-2
3	Date	-3
4	Storage number	-4

No.	Item name	Unit	Item number
12-5	Author		B133-5
6	Name of organization		-6
13-	Interpretation cost		
1	Total length interpreted	[Km]	B130-6
2	Total stations interpreted	·	-7
3	Total interpretation cost	(V.S.\$)	-8-1
- 4	Total interpretation cost	[Rp.]	-2
5	Interpretation cost per Km	[U.S.\$]	
6	Interpretation cost per Km	[Rp.]	
7	Interpretation cost per station	(U.S.\$)	
8	Interpretation cost per station		

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Remarks

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METHOD B0-34 INTERPRETATION MAP

Assignment Parameter		
	the state of the second second	
- Aréa name		. <u>-</u>
- Field or prospect name	يرتوها المراجع المراجع	
- Survey name	Elsen en also en Angelo €usel (**s1).	
- Period	na an an an an an agus san sin san a	· ,
Sorting Parameter	n and some and states and an arrest state of the state o	
	and the second	
Conditions of Changing Page	and the second	
- Proceeding to the next	kind of máp	- :

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Output Item

No.	Item name	Unit	Item number
1	Unit name		
2	Aréa name		B100-2
3	Field or prospect name		B150-1
4	Kind of survey		B100-4
5	Survey name		-1
6	Survey name		-6
7	Period		B130-2
8	No. of times		-1
9	Kind of map		B132-2
10	Identification of map		-1
11	Title		-3
12	Date		-4
13	Contour interval		-7
14	Scale		-8
15	Nicrofilm number		-9
16	Author		-10
17	Name of organization		-11
18	Identification of report		-12

Remarks

METHOD B0-4 WELL VELOCITY SURVEY

Assignment Parameter

- Area name
- Field name
- Well name
- Survey name
- Period

Sorting Parameter

Conditions of Changing Page

- Proceeding to the next well code

• .

Output Item

No.	Item name	Unit	Item number
1	Unit name		
2	Area name		B100-2
3	Pield or prospect name	-	B150-1
4	Well name		B100-3
5	Kind of survey		-4.
6	Survey name		-1
7	Survey name		-6
8	Period		-7
9	Name of organization		B140-2
10	Location		-3
11-	Contract		-1
1	Date		-1
2	Identification		-2
12	Datum level		-4
13	Source of energy		-5
14	Total shots		-6
15	Initial depth surveyed	(m)	-7

No.	Item name	Unit	Item number
16	Total depth surveyed	(m)	B140-8
17	Pormation name		°⊷9
18	Magnetic tape		-3
1	Tape number & supporting data		- E
2	Type of magnetic tape		-2
3	Quality		-3
4	Storage place		- 4
19	Synthétic séismogram		-10
20-	Report		B142
1	Identification of report		-1
2	Title		- 2
3			2
4	Storage number	· · · ·	-4
5	Author		-5
Ġ	Name of organization		-6
21-1	Total survey cost	[U.S.\$]	B140-11-1
2	Total survey cost	[Rp.]	-2

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 $(x_{i}) = (x_{i})_{i \in \mathbb{N}} + (x_{i})_{i \in \mathbb{N}}$

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Remarks

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METHOD BO-5 SPE	CIAL STUDY	
Assignment Parameter		
- Area name		
- Field or prospect name		5
- Survey name		
- Period	an ann an an tha thairt a stài	
7 × 1	$(x_1,y_2) \in \mathbb{R}^{n-1} \times \mathbb{R}^{n-1}$	
Sorting Parameter		
		i î
Conditions of Changing Page		4
- Proceeding to the next sur		17 I
recound to the next su		• •
Output Item		÷.
	a Maria (Persian de la 1977) antense	•
No. Item name	Unit Item num	bèr
l Unit name		·
2 Area nàme	B100-2	
3 Field or prospect name	B150-1	. '
4 Kind of survey	B100-4	
5 Survey name	-1	
6 Survey name	- 6	
7 Objective		
8 Author	B130-4	
9 Name of organization	- 5	
10 Period	B100-7	
11- Contract	B130-3	•
1 Date	-]	
2 Identification	-2	?
12 Line number	B131-1	
13 Survey name	-2	

Al - 69

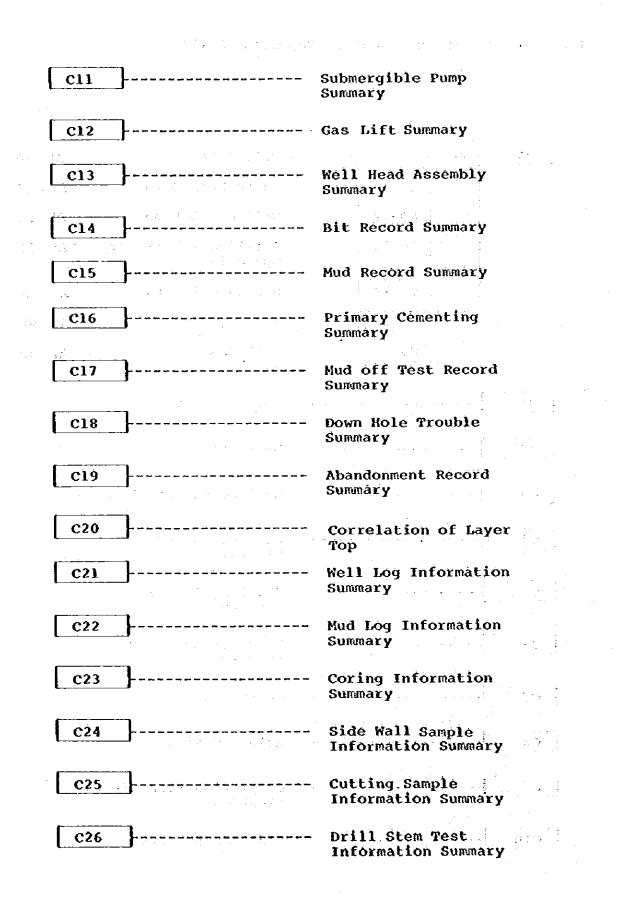
No. 	Item name	Unit	Item number
14-	Мар		B132
1	Kind of map	te provinsi Terret	-2
2	Identification of map		- - 1
3	Title	a an	s, t ⊢ −3
4	Date	.:	jeretki an (⊒ 1 4
5	Migrated or unmigrated		s
6	Horizon name		-6-1
7	Formation name		- 2
8	Contour interval		-7
9	Scale	· 」。「「「「「」」。	1
10	Microfilm number	n de la companya de l En la companya de la c	
11	Author	n an the second s	-10
12	Name of organization		-11 : : : : : : : : : : : : : : : : : : :
13	Identification of report		-12
15-	Report		B133
1	Identification of report	and a second	-1
2	Title		-2
3	Date	- 1	= ² ≤ 3 -3 s
4	Storage number		→4
5	Author		-5
6	Name of organization	· · · · ·	-6
16-	Interpretation cost		
1	Total interpretation cost	[U.S.\$]	B130-8-1
2	Total interpretation cost	[Rp.]	-2
			· · · · · ·
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			an san an san san san san san san san sa

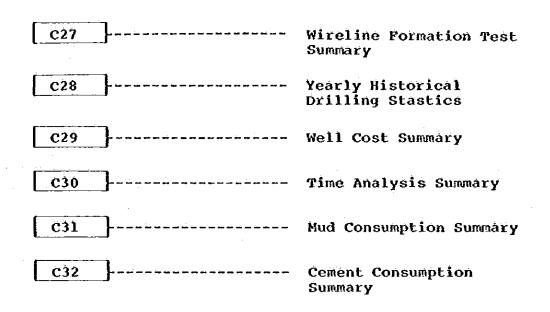
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3 C-WELL DATA INFORMATION

3-1 Diagram Index of Output Reporting Method

1 Page CÓ-1 ----- Well Data AI - 79 ¢ CO-11 Basic Well Data AI - 80 CO-12 Well Completion AI - 83 CO-13 Drilling & Workovér ÁI -- 89 Operation itan. CO-14 Geological Data AI - 93 CO-15 Testing Data AI - 97 CO-16 Well Cost AI = 101 Ċ1 Well Summary at the solution C2 Well List _____ **C**3 ______ Well Completion Summary **C4** Completion Record Diagram . . . Ċ5 Drilling Activity Summary 2 N 2 N 3 1 **C**6 ------Workover Activity Summary 영화 이 지원들이 대한 방법이 $\mathbb{P}_{\mathbb{P}}(\mathbf{y})$ **C**7 _____ Contractor syster fist og det The test state **C8** Hole & Casing Ċ9 Completion Sting Speci-化自然间分子 网络克莱马克 fication h-magaranga ayan -C10 Rod Pump Summary h af ingga seilet





3-2 Conceptual Specification of Output Réporting Method

METHOD CO-1 WELL DATA

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Assignment Parameter

- Workover number
- Province name 👘
- Aréa name
- Field or prospect name
- Well name
- Objective of well
- Objective of workover
- Complétion status
- Period
- Date

Condition of Changing Page

- Proceeding to the next well

Output Item

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Data items for this method consists of;

Items in METHOD CO-11 (Páge AI-68)
Items in METHOD CO-12 (Page AI-71)
Items in METHOD CO-13 (Page AI-77)
Items in METHOD CO-14 (Page AI-81)
Items in METHOD CO-15 (Page AI-85)
and

- Items in METHOD CO-16 (Page AI-89)

However, consideration would be taken to avoid improper repetition of data item.

METHOD CO-11 BASIC WELL DATA

gnment Parameter	•
- Workover number	$(1, \dots, n_{n-1}) = (1, \dots, n_{n-1}) + (1, \dots, n_{n-1}) = (1, \dots, n_{n-1})$
- Province name	and the second
- Area name	and the second
- Field or prospect name	and the product and finite
- Well name	$(1-2^{n+1})^{-1} = (1-2^{n+1})^{-1}$
- Objective of well	
- Objective of workover	and the second
- Completion status	and the second
- Period	
- Period - Date	

Condition of Changing Page

- Proceeding to the next well

Output Item

ю.	Item name	Unit	Item number
1	Unit name	an st≢an strandstrandstrandstrandstrandstrandstrandstrandstrandstrandstrandstrandstrandstrandstrandstrandstrand	
2			
3			
4	Field office name	tan ang ang ang ang ang ang ang ang ang a	BC 110 F - 1−5 (***)
5	Field or prospect name		-6
6	Well name	a shaqara ta ta ta shqipara a	- 1
7	Workover number	an a	-2
8	Objective of well		
9	Objective of workover		-8
0	Completion status		-9
1-	Objective formation name	<i>n</i> ė	-10
	Primary objective form		-1
	2 Secondary objective fo		-2

12 Objective layer name		C100-11
13 Completed formation n	ame	en e
14 Completed layer name		
15 Completed interval	[m]	C130-3
16 Operating date		C100-12
17 Spud date	a Ali	n Station The Station A ∺1 - 1
18 Date reached TD		-2
19 Rig release date		e e ep_e e trans p . −3 - 7
20 Total days to TD		
21 Total days	· :	1
22 Opérator	· ·	- 13
23 Drilling contractor	·	- 14
24 Rig name	. 1	
25 Rig type		-16
26 Vertical or Deviated		-17
27- Sidetracking	•	-18
1 Date		-1
2 Depth	(m)	-2
28- Local coordinate		~19
1 Base point		-1
2 X	[m]	-2
3 Y	[m]	-3
29- Marcator coordinate		-20
l Latitude (S)		-1
2 Longitude (B)		-2
30 Ref. No. of geophysi	cal survey	
(Seismic survey)		-21
31 Seismic liné No.		-22
32 Shot point No.		-23
33 Well location name		-24
34- Local coordinate		
(Bottom hole locatio	n)	-25
1 Base point		-1
2 X	[m]	-2
3 Y	(m)	-3

.

No.	Item name	Unit	Ite	m numbei	r
35-	Mercator coordinate		la di enere enere		
	(Bottom hole location)		C1C	0-26	÷ į
1	Latitude (S)		• • •	÷ =1	$e_{1} \in \mathcal{C}$
2	Longitudė (E)			-2	· .
36	Site description		· · · ·	-27	
37	Óriginal derrick floor	elevation	. :		
		[m]		-28	
38	Original derrick floor	height		en de de	
	from bottom flange	[m]		-29	1
39	Total depth	[m]	1. · · · · . ·	-30	- <u>-</u>
40	Plug back depth	(m)		-31	1.2
41	True vertical depth	(m)		-32	
42	Kick off point	[m]		-33	
43	Horizontal deviation	[m]		-34	
44	Mean drift angle	[deg]	· · · · · ·	-35	. 5
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				t di secondo	
				Paris 1	
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		1	an an an tha an tha Tha an tha an t		
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				1. 1	2

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METHOD CO-12 WELL COMPLETION

· · · · · · · · · · · · · · · · · · ·	
	an a
Assignment Parameter	
- Workover number	
- Area name	
- Pield or prospect name	
- Well name	
- Objective of well	
- Objective of workover	
- Completion status	
- Period	
- Date	
4	

Condition of Changing Page

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- Proceeding to the next well at Item Output Item

J.	Unit name	an a
2	Area name	C100-4
3	Field office name	- -5
4	Field or prospect name	-6
5	Well name	-1
6	Workover number	-2
7	Objective of well	-7 👘
8	Objective of workover	-8
9	Completion status	
10	Rig release date	-12-3
11	Vertical or deviated	-17
12	Original derrick floor	
	elevation (m)	-28
13	Original derrick floor	
	height from bottom flange [m]	-29

No.	Item name	Unit	Item numbér
14	Tótal depth	(m)	C100-30
15	Plug back depth	[m]	-31 com
16	Operator	·	-13
17-	Hole and casing		C120
1	Hole size	[in]	-1
2	Hole depth	(m)	-2
3	Casing size	[in]	-3
4	Grade		-5-1
5	Weight	(lbs/ft)	-2
6	Set depth/interval	[m]	-3
7	Liner hanger		-6
8	Liner slot interval	[m]	-7
9	Casing set date		-4
10-	Following items (No. 1 "Original String", "Du "Powered water injecti classification of Stri Completion string	mp flood water in on", and "Gas inj	jection"
			C130-1
ノート	String name		-2
	String specification Completed interval	[m]	-3
	Completed formation na		
	Completed layer name	ille .	
	Tubing	· .	
	Size	[in]	
	Weight		-2
	Grade	-	α το το από το το το 2 από το τρατικό το βα βα÷3 το 11 του
	Depth		an an gun an gun an gun a n an
	Packer depth		un orden zon un operatuer≢ Norden eine Beschoers ∺5 on Reiner
	-		-
	Pollowing items No. 19 "Rod pump" in classifi	-1 - No. 19-31) a cation of String	re appliéd to
			ित्व में हिंद्र विश्वति हो कि जाती है।
			专业人民,专业在专业资源分析。 下学

No. Item name	Unit	Item number
19- 1 String name	: :, = [:] ·	C130-1
- 2 String specification		- 2
- 3 Complèted interval	(m)	ja de ¹ • −3 to e
- 4 Completed formtion name		
- 5 Completed layer name	·	
- 6 Tubing	2 - 4 - K	C130-4
- 7 Size	[in]	-1
- 8 Weight	[lbs/ft]	-2
- 9 Grade		-3
-10 Depth		er en 10 <mark>- 4</mark>
-11 Packer depth	(m)	-5
-12 Subsurface pump		Cl31-1
-13 Installation date		j e la ⁿ thaite ⊥i e
-14 Size	(in)	−2
-15 Manufacturer		−
-16 Туре		-4
-17 Depth	(m)	-5
-18 Gas anchor		.
-19 Anchor catcher depth	(m)	an Brinnen (2 ∺3 th a Brinn
-20 Surface pump		~4
-21 Installation date		- 1
-22 Type		-2
-23 Manufacturer		ан малана стал <mark>.,</mark> 3 г. р.
-24 Model		-4
-25 Ident. No.	2	-5
-26 Prime mover		-5
-27 Installation date	-	
-28 Ťype		-2
-29 Manufacturer		-3
-30 Model		- 4
-31 Ident. No.		- 5

Pollowing items (No. 20-1 - No. 20-19) are applied to "Submergible pump" in classification of String specification.

No.	Item name	Unit	Item number
20	Completion string		
- 1	String name		C130-1
- 2	String specification		- 2
- 3	Completed interval	(m)	° ⊷ . −3
- 4	Completed formation name	1 <u>.</u>	Let a set a se
- 5	Completed layer name		•
- 6	Tubing		C130-4
~ 7	Size	[in]	• 1 • • 1
- 8	Weight	(lbs/ft)	-2
- 9	Grade		-3
-10	Depth	[m] .	1
-11	Packer depth	(m)	ev eltre e ≻5 t l
-12	Subsurface pump	t go e e	C132-1
-13	Installation date		art a 1-1 1-1
-14	Manufacturer		-2
~15	Model		-3
-16	Size		an a _1 -4 € a
-17	Ident No.		- 5 16-
-18	Depth at intake	(m)	- 6
-19	Gas separator		en al est d'al a -7 19.
•	Following items (No. 21-1 - "Gas lift" in classificatio	- 21-27) are on of String	applied to specification.
21	Completion string		
- 1	String name		C130-1
- 2	String specification		-2
- 3	Completed interval	(m)	- 3
- 4	Completed formation name		
	Completed layer name		
			nas sant <mark>14</mark> 1 Akon
- 5	Tubing		-4
- 5 - 6	Tubing Size		-
- 5 - 6 - 7	•	[in] [1bs/ft]	- 4 × 11 - 8 × 4 × 11 - 8 × 4 × 12 - 12 - 12 × 12 × 12 × 12 - 12 × 12 × 12

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21-11 Packer depth	[m]	C130-5
- 2 Macaroni pipe		C133-1
-13 Type of lifting		-2
-14 Type of installation		-3
-15 Installation date	. ¹ . 4. 4	-4
-16 Macaroni pipe data		
-17 Size		-1
-18 Length		-2
-19 Gás lift valve		-6
-20 Manufacturer		
-21 Model		-2
-22 Port size		-2
-23 Depth	(m)	-3
-24 Surface controller		-4
-25 Installation date		-,
-26 Manufacturer	·	-1
-27 Model		
22 Casing and tubing head a	assembly	-3 C100-37
- 1 Size	4	
- 2 Manufacturer		
- 3 Working pressure	[psi]	
23 Christmas tree assembly	([02]	-: C100-38
- 1 Date of installation		
- 2 Manufacturer		
- 3 Wing valve configuration	n	
- 4 Working pressure	[psi]	
4 Perforation	(For)	
- 1 Date		C140
- 2 Objective		-1
- 3 Interval	(m)	-2
- 4 Type of perforation	[z = z]	-3
- 5 Size of perforation		-4
- 6 Number of shot		
m 7 Damaster	[shots/ft]	-6
	(SHOUS/IC)	-7

AI -- 87

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No. Item n	ame	Unit	Item num	nber
24- 8 Ćaśing/liner pe			C140-8	
- 9 Status of perfo	ration		-9	м.
25 Plug back			C150	
- 1 Date of set			-1	-
- 2 Kind of plug ba	.ck	(m)	-2	
 - 3 Depth/interval - 4 Model of bridge 	nlug	[m]		
26 Abandonment rec			C160	
- 1 Reason of aband			system in 1 -1	
- 2 Hole condition	(Officient)		 	
				4. ¹
				-
	÷			8-1. 1
	-			
		- ·		
		1		
			an a	
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			na an an Anna a	
		}		

	· · · · · · · · · · · · · · · · · · ·	IG & WORKOVER OPERATION
		ter en aver d'ar gegannen ter en den er
Acci.	gnment Paramèter	
noor		$(1,1,2,1) = \frac{1}{2} \left(\frac{1}{2} \left(\frac{1}{2} \right) + \frac{1}{2} \left(\frac{1}{2} \right) \right) \left(\frac{1}{2} \left(\frac{1}{2} \right) + \frac{1}{2} \left(\frac{1}{2} \right) \right) \left(\frac{1}{2} \right) \left($
	- Norkover number	e ante en la companya de la companya
	- Area name	
	- Field or prospect name	e turre plusale factorie e
	- Well name	a second by a second second
	- Objective of well	 All states and states
	- Objective of workover	
	- Completion status	an an the second second second
	- Period	
Cond	ition of Changing Page	Linear in the second second
	- Proceeding to the next	
Outo	out Item	
- E	<u></u>	
No.	Item name	Unit Item number
No.	. 	Unit States Item number
1	Unit name	Unit State Item number
1 2	Unit name Area name	Unit Item number Cl09-4
1 2 3	Unit name Area name Field office name	Unit Item number Cl00-4 -5
1 2 3 4	Unit name Area name Field office name Field or prospect name	Unit Item number C100-4 -5 -6
1 2 3 4 5	Unit name Area name Field office name Field or prospect name Well náme	Unit Cl00-4 -5 -6 -1
1 2 3 4 5 6	Unit name Area name Field office name Field or prospect name Wéll náme Workover number	Unit 1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.
1 2 3 4 5 6 7	Unit name Area name Field office name Field or prospect name Well name Workover number Objective of well	Unit 1 tem number -5 -6 -1 -2 -7
1 2 3 4 5 6 7 8	Unit name Area name Field office name Field or prospect name Well name Workover number Objective of well Objective of workover	Unit 11em number -5 -6 -1 -2 -7 -8
1 2 3 4 5 6 7 8 9	Unit name Area name Field office name Field or prospect name Well name Workover number Objective of well Objective of workover Completion status	Unit 11em number -5 -6 -1 -2 -7 -7 -8 -9
1 2 3 4 5 6 7 8 9 10	Unit name Area name Pield office name Pield or prospect name Well name Workover number Objective of well Objective of workover Completion status Rig release date	Unit 1100-4 -5 -6 -1 -2 -7 -8 -9 -12-3
1 2 3 4 5 6 7 8 9 10 11	Unit name Area name Pield office name Pield or prospect name Well name Workover number Objective of well Objective of workover Completion status Rig release date Total days to TD	Unit 11em number -5 -6 -1 -2 -7 -8 -9 -12-3 -4
1 2 3 4 5 6 7 8 9 10 11 12	Unit name Area name Field office name Field or prospect name Well name Workover number Objective of well Objective of workover Completion status Rig release date Total days to TD Total days	Unit C100-4 -5 -6 -1 -2 -7 -7 -8 -9 -12-3 -4 -5
1 2 3 4 5 6 7 8 9 10 11 12 13	Unit name Area name Pield office name Pield or prospect name Well name Workover number Objective of well Objective of workover Completion status Rig release date Total days to TD Total days Vertical or Deviated	Unit 1 tem number -5 -6 -1 -2 -7 -7 -8 -9 -12-3 -4 -4 -5
1 2 3 4 5 6 7 8 9 10 11 12	Unit name Area name Field office name Field or prospect name Well name Workover number Objective of well Objective of workover Completion status Rig release date Total days to TD Total days	Unit C100-4 -5 -6 -1 -2 -7 -7 -8 -9 -12-3 -4 -5

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No.	Item name	Unit	Itém number
15	Öriginal derrick floor	height	
	from bottom flange	[m]	C100-29
16	Total depth	[m]	-30
17	Plug back depth	[m]	-31
18	True vertical depth	(m)	-32
19	Kick off point	(m)	-33
20	Holizontal deviation	(m)	-34
21	Mean drift angle	[deg]	-35
22	Ópérator		-13
23	Drilling contractor		-14
24	Rig name		-15
25	Rig type		-16
26	Bit record	· .	C17 0
- 1	Run No.		1
- 2	Bit size	[in]	-2
- 3	Model .		-3
- 4	Interval	[m]	-4
- 5	Footage drilled	[m]	
- 6	Hours	• • •	-5
- 7	Tooth dullness		-6-1
- 8	Bearing condition		-2
- 9	Bit gage		-3
27	Mud record		C180
- 1	Interval	(m)	-1
- 2	Type of mud		-2
- 3	Weight (SG)		-3-1
- 4	Viscosity	[sec]	-2
- 5	Water loss	[cc]	- 3
- 6	Sand content	[8]	
- 7	Salt content	(ppm)	n na enven Gerve <mark>s</mark> – 2€
- 8	0il content	(%)	-6
- 9	P.H.	1 A A A A A A A A A A A A A A A A A A A	• 9 40 • • • • • • • • • • • • • • • • • •
			nangen langebas (*1)
	- 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 199	* .	a station and the

No. de la companya de	unit Unit a	Item number
28 Mud consumption		c100-43 & 44
- 1 Name of mud agents	¹ . .	-1
- 2 Consumption	(kg) or [1]	-2
29 Mud off test		C190
- 1 Tested date		na an i ≓1 de la
- 2 Tested depth	[m]	-2
- 3 Equivalent weight of		
leak off pressure	[kg/cm ² /10m]	- a −3 .
30 Primary cementing		C210
- 1 Cementing dáté	 A second state 	u - Alsonaria - <mark>Al</mark> son
- 2 Casing size	[in]	- <u>-</u> 2
- 3 Stage name		3
- 4 Depth		≓4
- 5 Type of cement		-5-1
- 6 Additives	4	-2
- 7 Ślúrry weight (SG)		uas grego to grad d ∺3
- 8 Cemént bulk amount	[kg]	у
31 Squéeze cementing	5	C220
- 1 Date	$1 = \frac{1}{2} \left[\frac{1}{2} + \frac{1}{2} \right]^{\frac{1}{2}}$	
- 2 Objective	a galanta a kara kara kara kara kara kara kara	- 2
	• [* (m) •	не цва на ст -3 на
- 4 Type of cement		-4-1
- 5 Additives	1	-2
- 6 Slurry wright (SG)	e en la marte de la marte d	· -3
- 7 Cement bulk amount	[kg]	-4
- 8 Averáge squeezing i	hjection rate	$(-1)^{-1} = (-1)$
- 9 Squéézing final pre		-6
-10 Comment on result		
32 Cement & additive c		C100-45 &
- 1 Type or name of cem		
and additives		- 1
- 2 Consumption		-2

No. Item name	Unit	Item number
33 Kind of deviation survey		C100-36
34 Down hole troubles		C230
- 1 Kind of trouble		-1
- 2 Date emergenced		- −2
- 3 Date overcome		-3
- 4 Depth	[m]	€ 94 general de ≻4 1 Trak
- 5 Formation name	. · ·	n shu de e se shi na s
- 6 Summary of trouble		, na asago baga da −5
35 Miścellaneous troubles		C240
- 1 Summary of miscellaenous t	troubles	$\mathbf{T}_{\mathbf{r}}$
36 Ťime analysis		C100-47
- 1 Rigging up	[hr]	C100-47
- 2 Rigging down	[hr]	C100-47
- 3 Drilling	[hr]	C100-47
- 4 Round trip	[hr]	C100-47
- 5 Circulation	{hr]	C100-47
- 6 Coring	[hr]	C100-47
- 7 Reaming	[hr]	C100-47
- 8 Pressure test/injection		
test/mud off test	[hr]	C100-47
- 9 Running casing	[hr]	C100-47
-10 Cementing	[hr]	
-11 Wait on cement	[hr]	C100-47
-12 Completion/swab/prerarati	on[hr]	
-13 Fishing	[hr]	C100-47
-14 Repairing mud pump	[hr]	
-15 Repairing other		
-16 Well logging		
-17 Production test/BHP		
-18 Waiting		C100-47
-19 Shut down		C100-47
-20 Other		e C100-47
-21 Total	[hr]	e

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Assignment Parameter

- Norkover number
- Area name
- Field or prospect name
- Well nàme
- Objective of well
- Objective of workover
- Completion status
- Period

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Condition of Changing Page

- Proceeding to the next well

Output Item

No.	· · · · · · · · · · · · · · · · · · ·	Únit de las Baralles de	
1	Unit name	an a	
2	Area name		C100-4
3	Field office name		-5
4	Field or prospect name		-6
5	Well name		-1
6	Workover number		-2
7	Objective of well		-7
8	Objective of workover	· .	-8
9	Completion status		-9
10	Objective formation name		-10
11	Objective layer name	and the second	-11
12	Completed formation name		•
13	Completed layer name	.** ·	- f
14	Original derrick floor	an a	n da anticipation de la companya de
	elevation	(m)	-28

No.	Item name	Unit	Item number
15	Original derrick floor		
	height from bottom flange	[m]	C100-29
16	Total depth	[m]	-30
17	Rig release date		-12-3
18	Operator		-13
19	Stratigraphy	• .	C110
- 1	Formation name		-1
- 2	Layer name		-2
- 3	Top of formation		an thailt an start and an start and a s
	(Drilling depth)	(m)	
- 4	Top of layer		
	(Drilling depth)	[m]	-4
- 5	Top of formation		n an an Aragon (Aragon) ga anna 141 a giù. Anna
	(Subsea depth)	[m]	
- 6	Top of layer		
	(Subsea depth)	[m]	
- 7	Pormation thickness	[m]	
- 8	Layer net thickness	[m]	-6 -8
- <u>é</u>	Layer gross thickness	[m]	-7
-10) Lithology		-5
20	Well log		
-]	Service contractor		C100-42-5
- 2	? Kind of log		C250- 1
- 3	Run No.		- 2
- 4	i Interval	[m]	- 3
- !	5 Scale		n an Air an Air an
- 4	5 Survey date		- 1997 - 1995 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997
- 7	I Ident No.		- 6
- 4	3 Well log interpretation re	eport	C100-40
- 9	> Kind of interpretation		na de la francia de la construcción de la 21 de la construcción de
-10) Date	· ·	na an an Arthrean an Ar
-12	l Reference No.		- 2000 - 2007 - 2007 - 2007 - 2 −3 000 - 2007 E - 2010 - 2007 - 2008 - 2008 - 20 3
-1	2 Author/organization	::	n en en en en en en en 24 - Mari 1994 ≉en el 6

21 Mud log		
- 1 Service contractor		C100-42-
- 2 Type of logging unit		-39-
- 3 Lög interval	[m]	.
- 4 Mud lögging report		11.41 (1 - 41 (1
- 5 Date		2010 - 10 - 10 - 10 - 10 - 10 - 10 - 10
- 6 Reference No.		terreta ja ⊥
- 7 Author/organization		911 - 101 - 101 - 101 - 101 - 101 - 101 - 101 - 101 - 101 - 101 - 101 - 101 - 101 - 101 - 101 - 101 - 101 - 101
22 Coring		C260
- 1 Ćoring date		a. a. 41
- 2 Coré No.		-2
- 3 Ínterval	[m]	ana in the -3 -8
- 4 Čut	[m]	
- 5 Recovery	(m) a 1 an a	na. na na a 4 a
- 6 Recovery	[%]	
- 7 Formation name		
- 8 Layer name		tan santa ang
- 9 Core size		n statistica i entra
-10 Type of coring bit		ras na -46 s
-11 Type of barrel		
-12 Référence réport No.	t par de	
-13 Core lithology		C261
-14 Interval selected	[m]	÷1
-15 Lithology		-2
-16 Sorting		-3-
-17 Hardness		
-18 Grain size		2000 - 10 - 10 - 10 - 10 - 10 - 10 - 10
-19 Porosity	[%]	:. - .
-20 Colour		-
23 Side wall sample		C270
- 1 Sampling date		-1
- 2 Service contractor		-2
- 3 Référence report No.		-3
- 4 Sample No.		C271-1

No. Item name	Unit	Item number
23- 5 Sample depth	(m)	C271-2
- 6 Recovery	[%]	
- 7 Formation name		
- 8 Layer name		and the program is the second s
- 9 Lithology		- 1997 - 1998 - 19 74 - 2
-10 Porosity	[\$]	-5
-11 Colour		- 6
-12 Grain size		$= 1 + \sigma_1 + \sigma_2 + \sigma_3 + \sigma_4 + \sigma_5 $
-13 Sorting		
-14 Hardness		, de _{1,40} et ∂ , de e
24 Cutting sample		C280
- l Sampling interval	[m]	, , , , , , , , , , , , , , , , , , ,
- 2 Sampling frequency	.: [m]	-2
- 3 Reference report No.	:	-3
25 Hydrocarbon indication	1°	C290
- 1 Interval	[m]	$\mathbf{L}_{\mathbf{r}} = \{\mathbf{r}_{\mathbf{r}}, \mathbf{r}_{\mathbf{r}}, \mathbf{r}, \mathbf{r},$
~ 2 Lithology		, en eus -2 , fra 1
- 3 Formation name	-	
- 4 Layer name	:	an an the state of
- 5 Plourescenece show		 (a) 10 (b) (b) (a) (a) (a) (b)
- 6 Gas chromatogram compo	onent	Selata en la selata <mark>÷4</mark> selata e
- 7 cl	[8]	and the state of the second
- 8 C2	[8]	ngan tarang ang ang ang ang ang −2 ang
- 9 C3+	[%]	
-10 Select depth	[m]	en de sin −4 e sin 1
-11 Solvent		ay to <u>t</u> o t ⊤Š o v E -
-12 Porosity	[8]	e s <u>i</u> a sig t 6 - β1
-13 SW	[8]	, a status -7 −0 €
· .		
:		
		e geographic constraints de la
<u> </u>		and the second states of the
(1,1,1,1,2,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1		

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Here is the set of the

Assignment Parameter

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- Workover number
- Area name
- Field or prospect name
- Well name
- Objective of well
- Objective of workover
- Completion status
- Period

Condition of Changing Page

- Proceeding to the next well

Output Item

No.	Item name	Unit	Item number
1	Unit name		
2	Area name		C100-4
3	Field office name		-5
4	Field or prospect name		−6
5	Well name		
6	Workover number		-2
7	Objective of well		
8	Objective of workover		- -8
· 9 ·	Completion status		
10	Completed interval	(m)	C130-3
11	Completed formation name		
12	Completed layer name		n de la companya de l La companya de la comp
13	Original derrick floor	· .• .*.	n an
	elevation	[m]	C100-28
14	Original derrick floor		
	height from bottom flange	[m]	-29

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No.	Item namé	Unit	Item number
15	Rig release date		C100-12-3
16	Operator		-13
17	Drill stem test		C310
- 1	Test No.		-1
- 2	? Tested date		-2
- 3	B Service contractor		-3
- 4	Type of test		-4
- !	5 Test interval	(m)	-5
- (6 Tested formation		
	7 Tested layer		
- 1	8 Swabbing operation		C310-6
	9 Fluid recovery		-7
-1	0 Cumulative oil recovery	[m ³]	-1
-1	l Cumulative gas recovery	[10 ³ m ³]	-2
	2 Cumulative water recovery	(m ³)	-3
-1	3 Oil cut mud	(m ³)	≇ E, -4 (5, 6) (1
÷1	4 Water cut mud	(m ³)	-5
-1	5 Gas cut mud	[m ³]	-6
-1	6 Oil water cut mud	(m ³)	-7
-1	7 Gas water cut mud	[m ³]	~8
-1	8 Fluid recovery in chamber		-8
-1	9 Òil volume	[cc]	-1
-2	0 Gas volume	[m ³]	-2
-2	1 Water volume	[cc]	-3
-2	2 Mud volume	[cc]	-4
-2	3 Oil specific gravity		-5
-2	4 Gas specific gravity		-6
-2	5 Salinity of water	(ppm)	-7
-2	6 Prèssure & temperature		-9
-2	7 Bottom hole shut in		
	pressure	$[kg/cm^2]$	-1
-2	8 Bottom hole temprature	[°C]	
-2	9 Wellhead flowing pressure	[ng/on]	
-3	0 Choke size		i statut Augustat

17-31 Test analysis result	· ·	C310-10
-32 Static pressure	[kg/cm ²]	an an tent for an
-33 Plow capacity	[md-m]	- 2
-34 Permeability	[md]	-3
-35 Skinfactor		ana na 1111 a -4 a
-36 Damage ratio		-5
-37 PI ideal	$(m^3/d/kg/cm^2)$	-6
-38 PI actual	$(m^3/d/kg/cm^2)$	
-39 Plow efficiency	[10 ³ std m ³ /d]	je politik – se stati pavel statik - ⊷8 i s
-40 Open flow potential	(MSCMD)	-9
-41 Q.max	[m ³ d]	-10
-42 Drill stem test repo	ort	-11
-43 Date		- ⊥
-44 Reference No.		
-45 Author/organization		-3
-46 Fluid analysis repor	ćŧ	-12
-47 Title		-1
-48 Date		-2
-49 Reference No.		-3
-50 Author/organization		-4
18 Wireline formation	test	C320
- 1 Test No.		-1
- 2 Tested date		-2
- 3 Service contractor		-3
- 4 Testéd depth	[m]	-4
- 5 Tested formation		
- 6 Téstéd layer		
- 7 Succeeded or not		-5
- 8 Pluid recovery in c	hamber	-6
- 9 Oil volume	(cc)	-1
-10 Gas volume	[cuft]	-2
-11 Water volume	[cc]	-3
-12 Filtrate	[cc]	-4

No.		Item name	Uni	t	Item number
18-13	Test and	alysis result		A DEFENSION DE LA PROPERTIE	C320-7
-14	Kind of	fluid estimat	ed	ter and the second	
-15	Static p	pressure	[kg/cm	2]	-2
-16	Permeabi	ility	[md]	· · ·	i − 3
-17	Test rep	port			
-18	Title			• •	
-19	Date				
-20	Reference	cé No.			,∱nga, nga (1 43)a
-21	Author/	organization		5. State 19	na kirk ket − 4×8
-22	Analysi	s report	11. 14 1		n al he a + ∮≻ Hak
-23	Title				→1
-24	Dàte				a an tao na tao a ∺2 , 18 m
-25	Referen	cé No.			-3
-26	Author/	organization		. 19	- 4
:	-				ng an training an
					ta a ser a la companya da ser a s
:				· ·	
÷				1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	
		•			1997年),是新基本的资产的。(1998年)。 1997年
	•				
					e staffer de la compañía
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a service a service

Assignment Parameter

- Workover number

- Province name

– Areà nâme

- Field or prospect name

- Well name

- Objective of well

- Objective of workover

- Completion status

- Period

Conditions of Chaning Page

- Proceeding to the next well

Output Item

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No.	Item name Unit	Item number
1	Unit name	
2	Province name	C100-3
3	Area name	-4
4	Field office name	-5
5	Field or prospect name	-6
6	Well name	-1
7	Workover number	-2
8	Objective of well	-7
9	Objective of workover	-8
10	Completion status	-9
11	Rig release date	-12-3
12	Total days	-5
13	Total depth [m]	-30
14	Site description	-27
15	Operator	-13

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No.	Item name	Unit	Item number
16	Drilling contractor		C100-14
	Rig type		-16
18	Access and Preparation		
	Aceess - Land	(V.S.\$)	C330-1-1
	Access - Land	[Rp x 1000]	-2
- 3	Access - Marine	[U.S.\$]	-1
- 4	Access - Marine	[Rp x 1000]	-2
- 5	Well site	(V.S.\$)	-1
- 6	Well site	[Rp x 1000]	-2
- 7	Marine platform	[V.S.\$]	-1
- 8	Marine platform	[Rp x 1000]	-2
- 9	Derrick erection/disman	tling	
		(U.S.\$)	-1
-10	Derrick erection/disman	tiling	
		[Rp x 1000]	
-11	Service lines	{U.S.\$]	-1
-12	Service lines	[Rp x 1000]	-2
-13	Indemnities	[U.S.\$]	-1
-14	Indemnities	{Rp x 1000}	-2
19	Drilling		
- 1	Rigging up/down	[U.S.\$]	C330-1-1
- 2	Rigging up/down	[Rp x 1000]	-2
- 3	B Drilling consumables -	surface	
		[U.S.\$]	-1
- 4	Drilling consumables -	surface	
		[Rp x 1000]	-2
- 5	5 Drilling comsumables -	subsurface	
		[U.S.\$]	n de la construcción de la constru La construcción de la construcción d
- 6	5 Drilling comsumables -	subsurface	 A state of the second seco
		(Rp x 1000)	-2
- 1	7 Drilling string mainter	nance	
		(U.S.\$)	
- 1	B Drilling string mainte	nance	and a second and a second a s Second a second a seco
		[Rp x 1000]	-2 -2
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-11 Mud [U.S.\$] -1 -12 Mud [Rp x 1000] -2 -13 Fuel, lubricating oil, greases, steam, electricity [U.S.\$] -1 -14 Fuel, lubricating oil, greases, steam, electircity [Rp x 1000] -2 -15 Water [U.S.\$] -1 -16 Water [Rp x 1000] -2 20 Casing [U.S.\$] C330-1-1 - 2 Casing [U.S.\$] C330-1-1 - 2 Casing [U.S.\$] -1 - 4 Cementing [U.S.\$] -1 - 4 Cementing [U.S.\$] C330-1-1 - 2 Subsurface evaluation [Rp x 1000] -2 22 Completion [U.S.\$] C330-1-1 - 2 Stimulation treatments [Rp x 1000] -2 23 Salaries/wages [U.S.\$] -1 - 4 Completion and production testing [Rp x 1000] -2 -3 Completion and production -1 Crew salaries/wages [U.S.\$] -1 - 2 Crew salaries/wages [Rp x 1000] -2 -3 Drilling department (verhead [U.S.\$] -1 -4 Drilling department (verhead [U.S.\$] -1 -5 [U.S.\$] -4 -6 [U.S.\$] -1 -7 [
-12 Mud [Rp x 1000] -2 -13 Fuel, lubricating oil, greases, steam, electricity [U.S.\$] -1 -14 Fuel, lubricating oil, greases, steam, electircity [Rp x 1000] -2 -15 Water [U.S.\$] -1 -16 Water [Rp x 1000] -2 20 Casing [U.S.\$] C330-1-1 - 2 Casing [U.S.\$] C330-1-1 - 2 Casing [U.S.\$] C330-1-1 - 2 Casing [U.S.\$] C330-1-1 - 4 Cementing [U.S.\$] -2 21 Subsurface evaluation [U.S.\$] C330-1-1 - 2 Subsurface evaluation [U.S.\$] C330-1-1 - 2 Completion [U.S.\$] C330-1-1 - 2 Subsurface evaluation [Rp x 1000] -2 22 Completion [U.S.\$] C330-1-1 - 2 Stimulation treatments [Rp x 1000] -2 -3 Completion and production testing [U.S.\$] c330-1-1 - 4 Completion and production testing [Rp x 1000] -2 -3 Campletion and production testing [Rp x 1000] -2 -4 Completion and production testing [Rp x 1000] -2 -3 Drilling department overhead [U[S.\$] - -4 Drilling department [V.S.\$] -4 Drilli				1 P	
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 - 2 Crew salaries/wages Edus (Rp x 1000) - 3 Drilling department Boy and Four areas at approximation of the second s				5 C C C C C C C C C C C C C C C C C C C	c330-1-1
<pre>voverhead (0.01 x (U)S.\$) - 4 Drilling department (overhead [0.01 k (0)] (orbute line Ekr S- (0.02 k kot) content of 28 kot) 1- (2.02 kot) content of 28 kot) 1- (2.0</pre>		and the second			
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 Security Constraints Security Constraints				(Rp x 1000	
1997年1月1日(1997年1月1日) - 建装工程 建装工 日本 化二次指示的 计分子分析 1997年1月1日					
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No.	Item name	Unit	Item number
24	Transport-rig move		a an
- 1	Transport-rig move Land	[U.S.\$]	C330-1-1
	Transport-rig move Land		-2
- 3	Transport-rig move Water	[0.s.\$]	-1
- 4	Transport-rig move Water	[Rp x 1000]	-2
- 5	Transport-rig move Air	(U.S.\$)	• • • • • • • • • • • • • • • • • • •
- Ĝ	Transport-rig move Air	[Rp x 1000]	an an an trainn an a −2 an tr
25	Transport-Other		
- 1	Tránsport-other-Land	[U.S.\$]	C330-1-1
- 2	Transport-other-Land	[Rp x 1000]	-2
- 3	Transport-other-Water	(U.S.\$)	n an tha an ∺1 an an
- 4	Transport-other-Water	[Rp x 1000]	−2
- 5	Transport-other-Air	[U.S.\$]	- 1
- 6	Transport-other-Air	[Rp x 1000]	-2
26	Well equipment		
- 1	Wellhead equipment	[V.S.\$]	C330-1-1
- 2	Wellhead equipment	[Rp x 1000]	na ag ta -2 f a
- 3	Subsurface lifting		
	equipment	[V.S.\$]	C330-1-1
- 4	Subsurface lifting	ang san sa daraké séri. Tang	in element ≪there t
	eguipment	[Rp x 1000]	- 2
27	Temporary camp		na artista tila karata. Artista
- 1	Temporary camp faciliti	és	$e_{1} \in \mathbb{C} \times \mathbb{C}^{n-\frac{1}{2}}$
		(U.S.\$)	Ċ330-1-1
- 2	Temporary camp faciliti	es	
			, a sin 1.5 in 1a ÷2 in ≦0
- 3	3 Camp operation and serv	ice	
		[V.S.\$]	
- 4	I Camp operation and serv	ice	
	1997 - Alexandre Al	[Rp x 1000]	karsi, av ∸2
28	Depreciation	• <u>-</u> 4	
- 1	l'Drilling string	[0:8:\$]	C330-1-1
- :	2 Drilling string	[Rp x 1000]	-2
- :	3 Marine drilling unit	[U.S.\$]	-1
_ (4 Marine drilling unit	[Rp x 1000]	-2

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No. a character item name des Unit	، چې کا کا کا کا کې کا کا د د کا کا کا کا کا کا کې و. د چې کا
28- 5 Transport - Land [U.S.\$]	
- 6 Transport - Land [Rp x 1000]	2 a d 2 m f a l e e - 2 - 2
- 7 Transport - Water (U.S.\$)	
- 8 Transport - Water (Rp x 1000]	
- 9 Transport - Air [U.S.\$]	and a district of the
-10 Teansport - Air de det 👋 (Rp x 1000)	
-11 Spec. and heavy equipment	
[Ü.S.\$]	a ta sa parti i i i tit
-12 Spec. and heavy equipment	$= \sum_{i=1}^{n} \left(\sum_{j=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \frac{1}{2} \sum_{i=1}$
(Rp x 1000)	ngter und eine trade (4 2 % 200
-13 Other items [U.S.\$]	an a shina ƙasin ƙ aj ƙn
-14 Other items [Rp x 1000]	n guail na bhfor cudhac 22
-15 Field and district overhead	
(U.S.\$)	. tet ≻1
-16 Field and district overhead	endine waarde waard
[Rp x 1000]	,
-17 General overhead (0.5.\$)	e energie de la H1 - L
-18 General overhead [10 1 1 (Rp x 1000]	
-19 Depreciation on overhead	
facilities (U.S.\$)	
-20 Depreciation on overhead	
facilities [Rp × 1000]	
29 Totals by items	
- 1 Access and preparation [U.S.\$]	
- 2 Access and preparation [Rp x 1000]	
- 3 Drilling [U.S.\$]	
- 4 Drilling [Rp x 1000]	
- 5 Casing [U.S.\$]	
) is the state of the second
- 7 Subsurface evaluation [U.S.\$]	• La state de la seconda de l
- 8 Subsurface evaluation (Rp x 1000	1
	• Villate and short the special
-10 Completion (Rp x 1000	
	∎ a álim v ar torres ar seo
-12 Salaries/wages (6000 × 1000	

No. Item name	Unit	Item number
29-13 Transport-rig move	(U.S.\$)	
-14 Transport-rig move		
	[U.S.\$]	
-16 Transport-other	[Rp x 1000]	
-17 Well cost	[U.S.\$]	
-18 Well cost		
-19 Well equipment	[U.S.\$]	
-20 Well equipment	[Rp x 1000]	
-21 Temporary camp	[U.S.\$]	
-22 Temporary camp	[Rp x 1000]	
-23 Depreciation (Incl. Dr	illing String,	in the second second
Marine drilling unit,	Transport,	
Spec. & heavey equipme	nt; and other	
items)	[U.S.\$]	
-24 Depreciation (Incl. Dr	illing String,	
Marine drilling unit,	Transport,	
Spec. & heavey equipme		
items)	· · ·	
-25 Depreciation (Incl. Pi		
overhead, General over		
on overhead facilities		
-26 Depreciation (Incl. Fi		
overhead, General over		
on overhead facilities	s) (Rp x 1000]	
30 Subtotal		
T WOLF COOP	[U.S.\$]	
- 2 Well cost	[Rp x 1000]	
- 3 Well equipment	[U.S.\$]	
- 4 Kell equipment		
- 6 Camp cost	[Rp x 1000]	
- 7 Depreciation and over		
<u> </u>	[U.S.\$]	$U_{ij}(t) = \left(\frac{1}{2} \left(\frac{1}{2} \left(\frac{1}{2} \right) \right) + \frac{1}{2} \left(\frac{1}{2} \left(\frac{1}{2} \right) \right) \right)$
- 8 Depreciation and over		
	(Rp x 1000)	

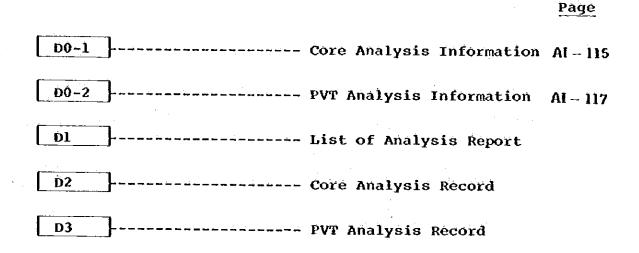
31Per meter cost- 1 Access and preparation[U.S.\$/m]- 2 Access and preparation[Rp x 1000/m]- 3 Drilling[U.S.\$/m]- 4 Drilling[Rp x 1000/m]- 5 Casing[U.S.\$/m]- 6 Casing[Rp x 1000/m]- 7 Subsurface evaluation[U.S.\$/m]- 8 Subsurface evaluation[Rp x 1000/m]- 9 Completion[U.S.\$/m]- 10 Completion[Rp x 1000/m]- 11 Salaries/wages[Rp x 1000/m]- 12 Salaries/wages[Rp x 1000/m]- 13 Transport-rig move[Rp x 1000/m]- 15 Transport-other[U.S.\$/m]- 16 Transport-other[U.S.\$/m]- 17 Well cost[U.S.\$/m]- 18 Well cost[Rp x 1000/m]- 20 Camp cost[Rp x 1000/m]- 21 Depreciation and overheads[Rp x 1000/m]- 22 Depreciation and overheads[Rp x 1000/m]- 33 Total cost of well[U.S.\$]33 Total cost of well[Rp x 1000]	Name	Item name	Unit
 2 Access and preparation [Rp x 1000/m] 3 Drilling [U.S.\$/m] 4 Drilling [Rp x 1000/m] 5 Casing [U.S.\$/m] 6 Casing [U.S.\$/m] 6 Casing [Rp x 1000/m] 7 Subsurface evaluation [U.S.\$/m] 8 Subsurface evaluation [Rp x 1000/m] 9 Completion [Rp x 1000/m] 10 Completion [Rp x 1000/m] 11 Salaries/wages [Rp x 1000/m] 12 Salaries/wages [Rp x 1000/m] 13 Transport-rig move [U.S.\$/m] 14 Transport-rig move [U.S.\$/m] 15 Transport-other [U.S.\$/m] 16 Transport-other [U.S.\$/m] 17 Well cost [U.S.\$/m] 18 Well cost [U.S.\$/m] 20 Camp cost [Rp x 1000/m] 21 Depreciation and overheads [U.S.\$/m] 22 Depreciation and overheads [Rp x 1000/m] 3 Total cost of well [U.S.\$] 	31	Per meter cost	
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 6 Casing 7 Subsurface evaluation 7 Subsurface evaluation 8 Subsurface evaluation 9 Completion 9 Completion 10 Completion 11 Salaries/wages 12 Salaries/wages 12 Salaries/wages 13 Transport-rig move 14 Transport-rig move 15 Transport-other 16 Transport-other 17 Well cost 18 Well cost 19 Camp cost 10 S.\$/m] 20 Camp cost 21 Depreciation and overheads [W.S.\$/m] 22 Depreciation and overheads [Rp x 1000/m] 33 Total cost of well [U.S.\$] 	- 4	Drilling	[Rp x 1000/m]
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 9 Completion [U.S.\$/m] -10 Completion [Rp x 1000/m] -11 Salaries/wages [U.S.\$/m] -12 Salaries/wages [Rp x 1000/m] -13 Transport-rig move [U.S.\$/m] -14 Transport-rig move [Rp x 1000/m] -15 Transport-other [U.S.\$/m] -16 Transport-other [Rp x 1000/m] -17 Well cost [U.S.\$/m] -18 Well cost [U.S.\$/m] -19 Camp cost [V.S.\$/m] -20 Camp cost [Rp x 1000/m] -21 Depreciation and overheads [U.S.\$/m] -22 Depreciation and overheads [Rp x 1000/m] -33 Total cost of well [U.S.\$] 	- 7	Subsurface evaluation	[U.S.\$/m]
-10 Completion[Rp x 1000/m]-11 Salaries/wages[U.S.\$/m]-12 Salaries/wages[Rp x 1000/m]-13 Transport-rig move[U.S.\$/m]-14 Transport-rig move[Rp x 1000/m]-15 Transport-other[U.S.\$/m]-16 Transport-other[U.S.\$/m]-17 Well cost[U.S.\$/m]-18 Well cost[U.S.\$/m]-19 Camp cost[U.S.\$/m]-20 Camp cost[Rp x 1000/m]-21 Depreciation and overheads[U.S.\$/m]-22 Depreciation and overheads[Rp x 1000/m]33 Total cost of well[U.S.\$]	- 8	Subsurface evaluation	(Rp x 1000/m)
-11 Salaries/wages[U.S.\$/m]-12 Salaries/wages[Rp x 1000/m]-13 Transport-rig move[U.S.\$/m]-14 Transport-rig move[Rp x 1000/m]-15 Transport-other[U.S.\$/m]-16 Transport-other[Rp x 1000/m]-17 Well cost[U.S.\$/m]-18 Well cost[Rp x 1000/m]-19 Camp cost[U.S.\$/m]-20 Camp cost[Rp x 1000/m]-21 Depreciation and overheads[U.S.\$/m]-22 Depreciation and overheads[Rp x 1000/m]33 Total cost of well[U.S.\$]	- 9	Completion	[U.S.\$/m]
-12Salaries/wages[Rp x 1000/m]-13Transport-rig move[U.S.\$/m]-14Transport-rig move[Rp x 1000/m]-15Transport-other[U.S.\$/m]-16Transport-other[Rp x 1000/m]-17Well cost[U.S.\$/m]-18Well cost[Rp x 1000/m]-19Camp cost[U.S.\$/m]-20Camp cost[Rp x 1000/m]-21Depreciation and overheads[U.S.\$/m]-22-22Depreciation and overheads[Rp x 1000/m]33Total cost of well[U.S.\$]	-10	Completion	[Rp x 1000/m]
-13 Transport-rig move[U.S.\$/m]-14 Transport-rig move[Rp x 1000/m]-15 Transport-other[U.S.\$/m]-16 Transport-other[Rp x 1000/m]-17 Well cost[U.S.\$/m]-18 Well cost[U.S.\$/m]-19 Camp cost[U.S.\$/m]-20 Camp cost[Rp x 1000/m]-21 Depreciation and overheads[U.S.\$/m]-22 Depreciation and overheads[Rp x 1000/m]33 Total cost of well[U.S.\$]	-11	Salaries/wages	[U.S.\$/m]
-14 Transport-rig move(Rp x 1000/m]-15 Transport-other[U.S.\$/m]-16 Transport-other[Rp x 1000/m]-17 Well cost[U.S.\$/m]-18 Well cost[Rp x 1000/m]-19 Camp cost[U.S.\$/m]-20 Camp cost[Rp x 1000/m]-21 Depreciation and overheads[U.S.\$/m]-22 Depreciation and overheads[Rp x 1000/m]33 Total cost of well[U.S.\$]	-12	Salaries/wages	[Rp x 1000/m]
-15 Transport-other[U.S.\$/m]-16 Transport-other[Rp x 1000/m]-17 Well cost[U.S.\$/m]-18 Well cost[Rp x 1000/m]-19 Camp cost[U.S.\$/m]-20 Camp cost[Np x 1000/m]-21 Depreciation and overheads[U.S.\$/m]-22 Depreciation and overheads[Rp x 1000/m]33 Total cost of well[U.S.\$]	÷13	Transport-rig move	[U.S.\$/m]
-16 Transport-other[Rp x 1000/m]-17 Well cost[U.S.\$/m]-18 Well cost[Rp x 1000/m]-19 Camp cost[U.S.\$/m]-20 Camp cost[Rp x 1000/m]-21 Depreciation and overheads[U.S.\$/m]-22 Depreciation and overheads[Rp x 1000/m]33 Total cost of well[U.S.\$]	-14	Transport-rig move	[Rp x 1000/m]
-17 Well cost[U.S.\$/m]-18 Well cost[Rp x 1000/m]-19 Camp cost[U.S.\$/m]-20 Camp cost[Rp x 1000/m]-21 Depreciation and overheads[U.S.\$/m]-22 Depreciation and overheads[U.S.\$/m]-23 Total cost of well[U.S.\$]	-15	Transport-other	[U.S.\$/m]
-18 Well cost [Rp x 1000/m] -19 Camp cost [U.S.\$/m] -20 Camp cost [Rp x 1000/m] -21 Depreciation and overheads [U.S.\$/m] -22 Depreciation and overheads [Rp x 1000/m] 33 Total cost of well [U.S.\$]	-16	5 Transport-other	[Rp x 1000/m]
-19 Camp cost[U.S.\$/m]-20 Camp cost[Rp x 1000/m]-21 Depreciation and overheads[U.S.\$/m]-22 Depreciation and overheads[Rp x 1000/m]33 Total cost of well[U.S.\$]	-17	Well cost	[U.S.\$/m]
-20 Camp cost [Rp x 1000/m] -21 Depreciation and overheads [U.S.\$/m] -22 Depreciation and overheads [Rp x 1000/m] 33 Total cost of well [U.S.\$]	-18	B Well cost	[Rp x 1000/m]
-21 Depreciation and overheads [U.S.\$/m] -22 Depreciation and overheads [Rp x 1000/m] 33 Total cost of well [U.S.\$]	-19) Camp cost	[U.S.\$/m]
[U.S.\$/m] -22 Depreciation and overheads (Rp x 1000/m) 33 Total cost of well [U.S.\$]	-26	0 Camp cost	[Rp x 1000/m]
-22 Depreciation and overheads [Rp x 1000/m] 33 Total cost of well [U.S.\$]	-2	1 Depreciation and over	neads
(Rp x 1000/m) 33 Total cost of well [U.S.\$]			{U.S.\$/m]
33 Total cost of well [U.S.\$]	-2	2 Depreciation and overl	neads
			[Rp x 1000/m]
33 Total cost of well [Rp x 1000]	33	Total cost of well	(U.S.\$)
	33	Total cost of well	[Rp x 1000]

Item number

4 D-PETROPHYSICAL AND PVT ANALYSIS DATA INFORMATION

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4-1 Diagram Index of Output Reporting Method



4-2 Conceptual Specification of Output Reporting Method

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Assignment Parameter		
× 3. + 27.5 (2.3)		
- Area name	at the	
- Field or prospect name - Formation name		
- Layer name - Kind of analysis	Enter e Querra Mensione	
- Period	and the state of the second states of	2
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Sorting Parameter	and the state of the	<i></i>
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Conditions of Changing Page	e se viende de la company	·
- Proceeding to the next an		

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Output Item

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No.	Item name for output	Unit	Item number (Refer to data
ì	Analysis identification		D100-1
2	Province name		-3
3	Area name		-4
4	Field office name		-5
5	Field or prospect name		-6
6	Well name		7
7-	Order document		-8
1	Daté		-1
2	Order document number		-2
8-	Invoice		-9
1	Date		-1
2	Invoice number		-2
9-	Sample analysis report		-10
1	Title		-1
2	Date		-2
3	Author		-3
4	Organization of author		-4
10	Location of laboratory		-11

lo,	Item name for output	(Rei	n number fer to data ructure)
1~ T	otal cost	DIÓ	0-12
	S\$		-1
2 R	•	na an taon an taon Ar an taon an taon	
	P ormation name	511	
	eservoir unit name		
		4	-3
-	ayer name		. <u></u>
	ampling period		-5
	(ind of sampling	DÌÌ	1-1
	kind of analysis		-2
18 1	Number of sampling	en e	•• •
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METHOD D0~2	PVT ANALYSIS	INFORMATION	
		· · ·	
Assignment Paramèter			1 -
- Area name			:
- Field or prospect na	áme	+ 1	
- Formation name - Reservoir unit name		a jika ta ta ta ta ta ta	
- Kind of analysis		$\frac{1}{2} \left(\frac{1}{2} + 1$	
- Period		an an an an an Array an Array Array an Array an Arr	
	•.		·
Sorting Parameter		1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 -	. *
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CONDICIONS OF Changing Pay		$(x_1, y_2, \dots, y_n) = (x_1, y_2, \dots, y_n) = (x_1, y_2, \dots, y_n)$	가 II 이 가

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- Proceeding to the next analysis

Output Item

Unit Item number No. Item name (Refer to data structure) D100-1 Analysis identification 1 -3 2 Province name -4 Area name 3 -5 Field office name 4 -6 Field or prospect name 5 -7 6 Well name --8 Order document 7-·· -1 1 Date -2 2 Order document number -9 8-Invoice -1 1 Date -2 Invoice number 2 -10 Sample analysis report 9--1 1 Title -2 2 Date -3 3 Author -4 Organization of author 4 -11 10 Location of laboratory

No.	No. Item name for output		Item number (Refer to date 		
11-	Total cost		-12		
1	US\$		-1		
2	Řp	. ·	-2		
12	Formation name		D110-1		
13	Reservoir unit name		-2		
14	Layer name		-3		
15	Sampling period		-4		
16	Kind of sample		-6		
17	Number of analysis		D111-1		
18	Number of samples		-2		

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5 E-PRODUCTION DATA INFORMATION

5-1 Diagram Index of Output Reporting Method

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BO Digestif spil vic sector de la contraction d	1 – 129
(1) Monthly Oil & Total Condensate and Total Gas Production	:
<u>For a prest interview with a state of the s</u>	
B2 By Block Station	:
E3 By Well	
E4 For Formation by Field	•••
E5 By Reservoir Unit	
E6 By Well by Block Station	
B7 By Reservoir Unit by Well	* : }
E8 } By Well by Reservoir Unit	

(2) Monthly Oil, Gas Cap Condensate and Anna Anna Sociated Condensate Production Anna Condensate Production

E9	By Field
<u>в10</u>	By Block Station
E11	For Formation By Field
B12	By Reservoir Unit

(3) Monthly High Pressure Gas, Medium Pressure Gas and Low Pressure Gas Production

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E13	}	By Field
B14]	By Block Station
B15]	By Well
B16]	By Well by Block Station
B17]	For Formation by Field
E18]	By Reservoir Unit

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(4) Monthly Solution Gas, Gas Cap Gas and Nonassociated Gas Production

:

E19	By Field
<u> </u>	By Block Station
[<u>B21</u>]	For Formation by Field
E22	By Reservoir Unit

-

(5) Historical Monthly Oil & Total Condensate and Total Gas Production

B23					•
B24	For	Field	_		
		Block Station	-		
B26	For	Well		. :	
B27		and the second	-		
<u>E28</u>	For	Reservoir Unit			

(6) Historical Monthly Oil, Gas Cap Condensate and Nonassociated Condensate Production

E29	For	Area	n n	
B30			10.1	:
		Block Station		
B32	For	Formation		
B33	For	Reservoir Unit		

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(7)	Historical Monthly High Pressure Gas, Medium Pressure Gas and Low Pressure Gas Production

E34 } Por Area	
B35 Field	
B36 Por Block Station	::::
B37	
B38 For Formation	
B39 For Reservoir Unit	

(8) Historical Monthly Solution Gas, Gas Cap Gas and Nonassociated Gas Production

E40	For	Area
E41	Por	Pield
Е42		Block Station
E43 }	For	
E44	Port	Réservoir Unit

(9) Monthly Water Injection

E45			
1I		By Field	;
B46			:
E47		For Formation by Field	-
B48		By Reservoir Unit	
B49	, , , , , , , , , , , , , , , , , , , ,	By Reservoir Unit by Well	
B50		By Well by Reservoir Unit	
	- 11日日 - 11日日 - 11日日 - 11日日 - 11日日		

(10) Monthly Gas Injection

B51	By Field
B52	By Well
E53	For Formation by Field
<u>B54</u>	By Reservoir Unit
B55	By Reservoir Unit by Well
B56	By Well by Reservoir Unit

(11) Historical Monthly Water Injection

<u></u>	For	Area or official states
<u>E58</u>	For	Field
B59		
E60	For	Pormation
	For	Reservoir Unit

(12) Historical Monthly Gas Injection

E62	· For	Area	•
B63	· For	Pield	
E64			
<u> </u>		Pormation	
E66	For	Réservoir Unit	***** ****
	1. ·	· · ·	

(13) Nonthly Gas Production and Consumption

в67	 Ву	Area
E68	 Ву	Field

(14) Historical Monthly Production and Consumption

B69	- For Unit II	-
B70	· For Area	• • •
E71	- For Field	

	(15)	Mont	hly Oil	Consu	ımpt	ión
t a ser	12.00010		le en statistist.	-		
E72]	• •			Ву	Area

(16) Historical Monthly Oil Consumption

B73	 For	Unit	11
E74	 For	Arèa	

(17) Well Status Report for All Wells

E75	 Ву	Field
B76	 Вy	Rèservoir Unit

(18) Well Status Report for Producer

E77	 Вy	Field
B78	 ву	Reservoir Unit

(19) Well Status Report for Injector

B79	}	Ву	Field
E80		Вy	Réservoir Unit

(20) Well Status Report for Shut-in Well

B 81	 Ву	Field
E82	 By	Reservoir Unit

E83	By Field
E84	} By Reservoir
	and An 1945 - An ann an Anna ann an Anna an Anna A
	(22) Well Status of Reservoir Unit
E85	Well Status of Reservoir Unit
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	an an ann an Arran a Arran an Arran an Arr Arran an Arran an Arr
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5-2 Conceptual Specification of Output Reporting Method

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ssignment Parameter			÷ 1
- Area name		an an an the part of the second states and	
	·	land a the second state	• {
- Block station r	•		
1. ST			
- String name			
		and the part of the second	-
- Well status		a an an an an Arthressen a	÷ .
- Kind of reserv	-		
- Kind of pressu	rë for gas	the groups of the Marcon Sciences	: '
- Water cut		general second second second second	
- Gas-oil ratio	₹_1. ex	and the second	
- Kind of inject	ion fluid		18
- Period			
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No.	Item name	Unit	Item number
1	Area name		в 100-5, 200-1
2	Field name		-7
3	Well name	n see 1905 - Angel States (19	-1
4	Workover number		-2
5	String name		-3
6	Date	L .	Е 110-1, 120-1, 210-1
7	Kind of completed zone		-2, -2
8	Well status		-3, -3
ģ	Block station name	·	-4
10	Layer name		в 111-4, 121-3

No.	Item name	Unit	Item number
11	Choke size	(mm)	Е 110-5
12	Casing pressure	[kg/cm ²]	
13	Tubing pressure	$[kg/cm^2]$	-7
14	Separator pressure	$[kg/cm^2]$	a (* 48 . av ¹ .)
15	Monthly production rate	[std m ³]	an an an t-se t- 29 An t-s
	1. 0il	[std m ³]	
	2. Gas	· · · · ·	
	1. High pressure gas	[10 ³ std n	<mark>(3</mark>)
	2. Medium pressure ga		
	3. Low pressure gas		<mark>,</mark> ∛] sales skrit teen ≜ 3m
	3. Water cut	[\$]	aneraan an 123 8 m
16	Production days	[d]	τ βαλαγικά – δ ωλό το το
17	Historical Production da	ys	
	•	[d]	e e en regel a 211 dê e
18	Reservoir unit name		111 -1, 121-1
19	Kind of recovery method	[\$]	1.415 -2 - ^{1.6}
20	Share factor for product	ion	os£ la <u>c</u> rat iag secale s
21	Monthly gas injection vo	lume	一般的 化合理 化合理性
		(10 ³ std r	n ³] 112-1
22	Monthly injection rate	in case ([std m ³]	of water 120-4
	· · · · · · · · · · · · · · · · · · ·	in case of	of gas
		(10 ³ std 1	•
23	Kind of injection fluid	-	-5
24	Piltration		
25	Additives		
26	Injection days	[ð]	
27	Historical injection day	/\$ [d]	-9
28	Share factor for injecti		
		[%]	121-2
29	Date		210-1
			na si siyan yang kana si
			化合物 化硫酸盐 机过度 网络美国美国人 新闻

.

30	Monthly Oil Consumption at 15°C E 210-2	
	l- Refinery plaju -1	
		1
	2. Water cut (%)	-2
		-3
		- 4
	2- Field use	·'.
	1. Road mainténance (m ³)	
	2. Well servicing [m ³]	·2
-	•	•3
- 1	4. Other (m ³)	-4
	Date	
32 3	Monthly gas consumption 310-2	
	1- Own use -1	
	1- Fuel	1
1	1- Associated gas	-1
	1. High pressure gas	
	[MM scf]	-1
	2. Medium pressure gas	
	[MM scf]	-2
	3. Low pressure gas(MM scf)	-3
	2- Non associated gas	-2
	1. High pressure gas	
	[MM scf] 2. Medium pressure gas	-1
i.		
	3. Low pressure gas[MM scf]	-2
	2- Injection gas	
*	1- Associated gas	-2
	1. High pressure gas	-1
ž		•
÷.		-1
	[MM scf]	~
	3. Low pressure gas [MM scf]	-2 -3

No	Init Item number
32 1-2-2- Non associated gas	B 310-2-1-2-2
1- High pressure gas	
(мм	scf]
2- Medium pressure gas	the transmission of the second
(мм	scf]
3- Low pressure gas(MM	sef] - et séres a la
3- Gas lift	
1- Associated gas	era de la contra de la contra d e la
1. High pressure gas	$(p, e_1) \in \{p_1, \dots, p_{n-1}\} \in \mathbb{R}^{n-1} \times \{p_1, \dots, p_n\}$
(MM	scf] -1
2. Medium pressure gas	
(MM	scf) -2
3. Low pressure gas(MM	scf] The statement of the Market 1-3 state
2- Non associated gas	u a tradición −2
1. High pressure gas	
(MM	scf]
2. Medium pressure gas	per en
(MM	scf] -2
3. Low pressure gas(MM	scf]
4- Compressor	- 4
1- Associated gas	en parte de la construction -1 de la construction
1. High pressure gas	eren de la calendaria de la S
(MM	scf] - subscription -1
2. Medium pressure gas	
[MM]	scf]
3. Low pressure gas[MM	scf] -3
2- Non associated gas	j - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -
1. High pressure gas	and the second
[MM	scf]agedeesa ursa Arethou -1
2. Medium pressure gas	este en provaert por sub-stelen este en sub-
ММ) ММ	scf] -2
3. Low pressure gas(MM	.scf]an se nan'Es≊ry∰3
(201.27 ³)	nag neste aditor tentisti st

lo. Ite	m name I	Unit	Item	number
32 1-5- Utilitie	s	· ·	в 310-2-1-	5
1- Associ	atèd gas		· • •	-1
1. High	pressure gas		: .	
$\frac{1}{2} = \frac{1}{2} \left(\frac{1}{2} + \frac{1}{2} \right)^2 \left(\frac{1}{2} + \frac{1}{2} \right)^2 \left(\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} \right)^2 \left(\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} \right)^2 \left(\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} \right)^2 \left(\frac{1}{2} + \frac{1}{2} +$	[MM	scf]	-	-1
2. Međi	um pressure gas	1 - 1 - ¹		
	[MM]	scf]		-2
3. Low	pressure gas[MM	scf]		-3
2- Non as	sociated gas			-2
1. High	pressure gas			
	(MM	scf]	. Second and	-1
2. Medi	ium pressure gas	•		
	[MM]	scf]	a 1	-2
3. Low	préssure gas [MM	scf]		-3
2- Process	-	1. C	-2	
1- LPG Pla	nt	· · ·	· · · · · · · · ·	-1
1- Assoc	iated gas			-1
1. High	h pressure gas	e e este a tra	,	
	I MA	l scf]		-1
2. Med	ium pressure gas	3		
e E	[M]	{ scf]		-2
3. Low	pressure gas[M	i scf]		-3
2- Non a	ssociated gas		e sa anti-	-2
1. Hig	h pressuré gas	e e e e		
	1 (MI	scf]		-1
2. Med	ium pressure ga	5	· .	
	(MI	scf]		-2
3. Low	pressure gas (M	M scf)		-3
2- LNG Pla	nt		:	-2
1- Assoc	iated gas	nge ¹ land de	a set a set a set	-1
1. Hig	h préssuré gas	· · · · · · · · · ·		
É e la	10 yr (M	M scf]		-1
	ium pressure ga	S Table a se		
	С — — — — — — — (м	M scf)		-2
3. Low	pressure gas[M	M scf)		-3

No.	Les tables Item name sole Unit sets de Item number.
32	2-2-2- Non associated gas E 310-2-2-2-2
	1. High pressure gas -1
	2. Medium pressure gas -2
	3. Low pressure gas -3
	3- Pertilizer Plant
	l- Pusri II -1
	1- Associated gas and there we we have been builded -1
	1. High pressure gas and a subscience of the
	(MM scf] sector advantage of the sector -1
	2. Medium pressure gas
	[MM:scf]astar tage and the second s
	3. Low pressure gas
	at a (MM scf) has a set of the se
	2- Non associated gas
	1. High pressure gas
	[MM scf] un australia declaration -1
	2. Medium pressure gas succession and a f
	(MM scf) -2
	3. Low pressure gas a set and set of the set
	-3
	2- Pusri III (las data data data data data data -2
	1- Associated gas -1
	1. High pressure gas a contract and a set
	[MM scf] -1
	2. Medium pressure gas to such the second second
	[NM scf] -2
	3. Low pressure gas and a located the w
	[MM_scf] area and a solution −3
	for $2-$ Non associated gas $-$ way induction $1-2$
	1. High pressure gas the states destain the state of the states of the s
	(MM scf) -1
	2. Medium pressure gas the astern reaction at
	-2
	3. Low pressure gas been more set while the
	[MM scf] -3

	2-3-3- Pusri IV	E310-2-2-3-2-3
	1- Associated gas	- 1
	1. High pressure gas	
:	(MM scf)	-1
	2. Médium pressure gas	· · · · · · · · · · · · · · · · · · ·
	(MM scf)	-2
	3. Low pressure gas	
	(MM scf)	-3
	2- Non associated gas	-2
	1. High pressure gas	
	(MM scf)	-1
	2. Medium pressure gas	
:	(MM scf)	-2
	3. Low pressure gas	
•	[MM scf]	- 3
	4- Refinery	tin tangan 44
	l- Plaju	jn – n – n – −1
	l- Associatéd gas	-1
	1. High pressure gas	
	(MM scf)	- 1 - - 1
	2. Medium pressure gas	
	(MM scf)	-2
	3. Low pressure gas	
	[MM scf]	-3
	2- Nonassociated gas	- 2
	1. High pressure gas	
	(MM scf)	- 1 - - 1
	2. Medium pressure gas	
	[MM scf]	- -2
	3. Low pressure gas	
	(MM scf)	-3

No.	Item name Unit Item	number
32	2-4-2- S. Gergon B310-2-2-4	-2
	1- Associated gas	-1
	1. High pressure gas	
	(MM scf)	-1
	2. Medium pressure gas	
	[HN scf]	-2
	3. Low pressure gas	
	[MM scf]	-3
	2- Nonassociated gas	-2
	1. High pressure gas contractions of	
4	(MM scf)	-ì
	2. Medium pressure gas	
	[MM scf]	-2
	3. Low pressure gas	
· .	(MM scf)	-3
	5- Polypropylene	5 🗇
	1- Associated gas	-1
	1. High pressure gas	
	(MM scf)	-1
	2. Medium pressure gas	
	[MM scf]	-2
	3. Low pressure gas	
	[MM scf]	-3
	2- Nonassociated gas	-2
	1. High pressure gas	
	(MM scf)	-1
	2. Medium pressure gas	
	[MM sof]	-2
	3. Low pressure gas	
	[MM_scf]	-3

2-6- Aromatic		B310-2-2-6
1- Associated ga	S	- 1
1. High pressu	ire gas	
	[MM scf]	-1
2. Medium pres	ssure gas	
-	(MM scf)	-2
3. Low pressu	té gas	
	(MM scf)	-3
2- Nonassociated	l gas	-2
1. High press		
	[MM scf]	-1
2. Medium pre		
		-2
3. Low pressu	-	
ST DON PLOODU	(MM scf)	-3
3- Sales	free man f	-3
1- City gas		-1
1- Associated g		-1
1- Associated g		
T. UTAU PLESS		-1
) Haddum nun		
2. Medium pre	[MM scf]	-2
 •		
	are gas(MM scf)	<u>.</u>
	d gas	_ _
1. High press		-1
	[MM scf]	
2. Medium pre	essure gas	
	(MM scf)	
	ure gas[MM scf]	-3 -2
	¥ ± tarin tarih salah sa	_
	gaštu strongo i naslada Naslada	-1
1. High pres		-
	(MM scf)	-1
2. Medium pr	-	
	(MM scf)	2
3. Low press	ure gas[MM scf]	

Name	Item name	U	Init	1	tém nu	nber
	3-1-2-2- Nonassociated ga	S		E310-3	-2-2-2	
	1. High pressure	gas	· .	· . · ·	1. A.L.	
		[MM	scf]	. 1 .	:	-1
	2. Medium pressur	e ga	IS			
		[MM]	sef]	i konsta		-2
	3. Low pressure g	as	•			
		(MM	scf]	 A state 	- ·	-3
33	Flare and loss				- 3	
	1- Plare		an the the	to the set of	-1	
	1- Associated gas	2		te silar	-1	
	1. High pressure gas			-		
			sef]		- · ·	-1
	2. Medium pressure ga					-
			scf]		, .	-2
	3. Low pressure gas					-3
	2- Nonassociated gas	•••••			-2	-
	1. High pressure gas	[MM	sefl	tra in 1	_	
	2. Medium pressure ga					-
			scf]		-	-2
	3. Low pressure gas	•	-			-3
	2- Loss	-	~~~;			-2
	1- Associated gas		· · ·		· •	-1
	1. High pressure gas		sofl			-1
	2. Medium pressure ga		-			1
	St fieddai's problate ge		scf]			-2
	3. Low pressure gas		-			-3
	2- Nonassociated gas			1.2.14	•	-2
	1. High pressure gas					-1
	2. Medium pressure gas		-	4		- 1
	21 neurom pressure ge		scf]			-2
	3. Low pressure gas	-	-			-2
	J. Don pressure gus		SCL			-0
				and the second second	•	
			e ser dar.	e este consta	¢	
	\$ A			n an truck an	ж. С	
			an an tha i fuirge	te de la secola		
	2 1				4 K	

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Remarks

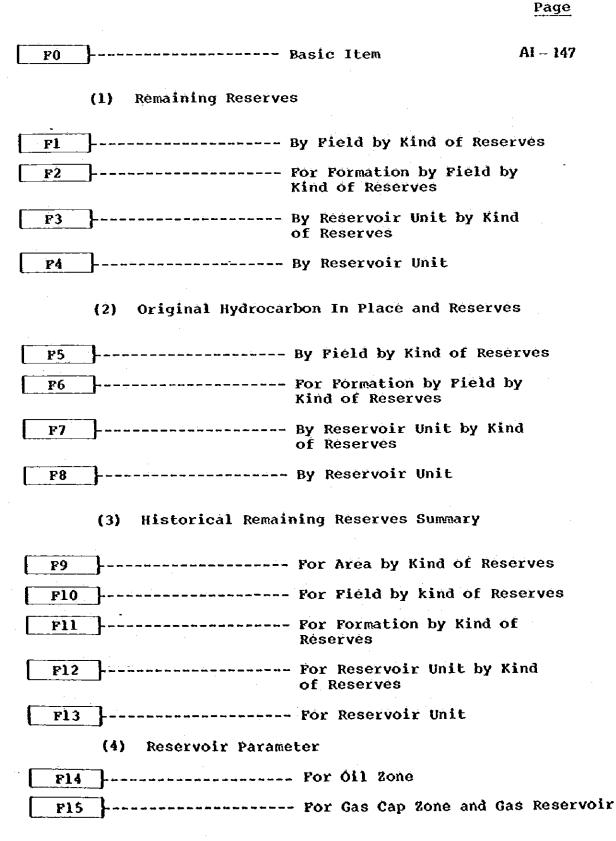
This is not what is presented as basic output report method in other part. This will not be actually output, but the assignment parameters and items described above will be made use of to prepare the output report for statistics.

6 F-RESERVES DATA INFORMATION

0 F-RESERVES DATA INFORMATION

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6-1 Diagram Index of Output Reporting Method



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6-2 Conceptual Specification of Output Reporting Method

METHOD FO BASIC ITEM

Assignment Pårameter

- Aréa namé
- Field name
- Formation name
- Reservoir unit name
- Development status of reservoir unit
- Kind of reserves
- Kind of recovery method

- Kind of reservoir
- Abandon condition for gas cap zone and gas reservoir
- Period

Basic Item

No.	Item name	Unit	Item number
	······································	(1	Refer to data structure)
	Area name		F 100-3
2	Field name		-5
3	Reservoir unit name		-1
4	Development status of res	ervoir unit	110-2
5	Kind of reservoir		100-6
6	Original oil in place		110-3
-	-	[10 ³ std m ³]	n a str <u>⊷1</u>
		$[10^3 \text{std m}^3]$	
	3. Possible	$[10^3 \text{std m}^3]$	-3
7	Oil Reserves		- 4 1 - 1
•	1. Proved		
	1. Primary recovery	110^3 std m ³	- 1
	2. Secondary recovery	2 2	-2
	3. Tertiary recovery	[10 ³ std m ³	-3

No.	Item name	Unit		Item number	
	، موجه که هم بن بن که چه چو که کر مرا به جو مخ به به چو مخ به به خو مخ به به خو چو چو خو س		(Refer to	data struct	ure)
7	2. Probable	à	•	10-4-2	
	1. Primary recovery	[10 ³ std]	•	-1	
	2. Secondary recovery	[10 ³ std]	~	-2	
	3. Tértiary recovery	{10 ³ std :	m ³]	-3	
	3. Possible	2	5	-3	
	1. Primary recovery	[10 ³ std	⊥	-1	
	2. Secondary recovery			-2	
	3. Tertiary recovery	(10 ³ std	m ³]	-3	
8	Yearly oil production	2		-5	
	1. From primary recovery	/ [10 ³ std	m ²]	-1	
	2. From secondary recove		3	la de la composición de la composición En esta de la composición	
	<u>.</u>	(10 ³ std	_	-2	
	3. From tertiary recover	y[10 ³ std	m `]	-3	
9	Original solution gas in	~	2	-6	· ·
	1. Proved	(10 ⁶ std	~	-1	
	2. Probable	[10 ⁶ std	A 1 1	-2	
	3. Possible	[10 ⁶ std	m ³]	-3	
10	Solution gas reserves	. ·		-7	
	1. Proved	c	2	-1	
	1. Primary	{10 ⁶ std	à	- 1 - 1 - 1 - 1 - 1 - 1	
	2. Secondary	{10 ⁶ std	· · · · · · · · · · · · · · · · · · ·	-2	ź
	3. Tertiary	[10 ⁶ std	m ³] _{1 2} .	-3	:
	2. Probable	<i>c</i>	3	-2	i.
	1. Primary	(10 ⁶ std			٦.
	2. Secondary	[10 ⁶ std	-	-2	
	3. Tertiary	[10 ⁶ std	m~]		
	3. Possible	6	3	-3	
	1. Primary	[10 ⁶ std	<u> </u>	, −1 ,	ŝ.
	2. Secondary	[10 ⁶ std		 2	
	3. Tertiary	(10 ⁶ std		-3 ,	
			N. 8	2 t. C	
			n de Calencer	er de la seconda	

No.	Item name	Unit	
11	Yearly solution gas	production	Р 110-8
	1. From primary rec		
	2. From secondary r	4	
		[10 ³ std m ³	³] ~2
	3. From tertiary re	~ ~ ~	
12	Reservoir parameter	for oil zone	-9
	1. Areal extend		
	1. Proved	[ha]	-1
	2. Probable	[hà]	-2
	3. Possible	[ha]	
	2. Net bulk rock vo	lume	-2
	1. Próvèd	(10 ⁶ std m	³] −1 c ¹ · · ·
	2. Probable	(10 ⁶ std m	³] -2
	3. Possible	(10 ⁶ std m	³]o e a en la 21, 2 3, e 0 a
	3. Weighted average	porosity	- 3
	1. Proved	[Fraction])
	2. Probable	[Fraction]) -2
	3. Possible	(Fraction]e tas internet a <mark>-3</mark> a s
	4. Weighted average	water saturatio	òn e la -4 la cui
	1. Proved	[Fraction] – 1 %
	2. Probable	[Fraction	-
	3. Possible	 A second sec second second sec	
:	5. Weighted average		
	1. Proved] - 1 10 1 10 1 10 1 10 1 10 1 10
	2. Prabable	[m ³ std m ³) – po sense operation -2
	3. Possible	(m ³ stā m ³] • • • • • • • • • • • • • • • • • • •
-	6. Gravity		1
	1. 011	(°API)	антан тара та -1 -
· ·		1	eutro do Herrica e 👘 🖓 🕂 🔁
	-		an an the affragment of -7
			ngo go chaol tha de la -1
	2. Gas	[cp]	-2

No.	Item name Unit	Item number (Refer to data structure)
12	8. Weighted gas oil ratio	F 110-9-8
	1. Proved [std m ³ /st	d m ³] a fa <u>-1</u> . f
		ad m ³]
	3. Possible (std m ³ /st	
13	Referènce report	
	1. Ťitlė	$\mathbf{v}_{1} = (\mathbf{v}_{1}, \mathbf{v}_{2}) = (\mathbf{v}_{1}, \mathbf{v}_{2}, \mathbf{v}_{3}) = \mathbf{v}_{1} + \mathbf{v}_{2} + \mathbf{v}_{3} + \mathbf{v}_{3}$
	2. Date	
	3. Reference number	ang as ⇒3 . I
	4. Author	ku del celto e <mark>⊕4</mark> une
	5. Organization of author	eet v tex ite 5 v t
	6. Map date	tang ata aka dari ≜ ⇒6 € aka jarah dari
14	Date	120-1
15	Development status of reservoir un	
16	Original condensate in place	
		<mark>3</mark>]•
	2. Probable [10 ³ std m	
		³]
17	Condensate reserves	en 12 − 4 ant 12 °
	1. Abandon condition is 60 or 20 k	scattor grant a stati <mark>÷1</mark> de
	1. Proved	Thermore T -1 e
	1. Primary recovery [10 ³ std m	3) 2, (a dame ÷1)
	2. Secondary recovery[10 ³ std m	<mark>3</mark>]
	3. Tertiary recovery (10 ³ std m	<mark>3</mark>] nu se anto 12 une tue ne 12 −3 0
	2. Probable	
	1. Primary recovery [10 ³ std m	$egin{aligned} 3 \ 1 \$
	2. Secondary recovery[10 ³ std m	3] · · · · · · · · · · · · · · - · -2
	3. Tertiary recovery [10 ³ std ш	<mark>,3</mark>] ∂s≱s√as −3 3
	3. Possible	-3
	1. Primary recovery [10 ³ std m	3 <mark>3]</mark>
	2. Secondary recovery [10 ³ std m	
	3. Tertiary recovery (10 ³ std m	

No.	Item name	Unit	Item number
		(Ref	er to data structure
17	2. Abandon condition is		e and the second second
	30 or 10 ksc		F 120-4-2
	1. Proved	2	-1
	1. Primary recovery	[10 ³ std m ³]	 1
	2. Secondary recove	$ry(10^3 std m^3)$	-2
	3. Tertiary recover	y (10 ³ std m ³]	-3
	2. Probable	-	-2
	1. Primary recovery	/ [10 ³ std m ³]	- 1
	2. Secondary recove	ery[10 ³ std m ³]	-2
	3. Tertiary recover	ry [10 ³ std m ³]	in en en −3
	3. Possible	- 	3 `-
	1. Primary recovery	y [10 ³ std m ³]	- 1
	2. Secondary recov	$ery[10^3 std m^3]$	-2
	3. Tertiary recove	$ry^{[10^3 \text{std } m^3]}$	ana ang ang ang -3 ang
18	Yearly condensate prod		-5
10	1. Prom primary recove	ry [std m ³]	• • • • • - 1
	2. Prom secondary reco		
	2. Trom becommung stre	[std m ³]	-2
	3. From tertiary recov	2	una produkazio 13 ° za ²¹ 0000 m
19	Total original gas in	place	
12	1. Proved	[10 ⁶ std m ³]	
	2. Probable	[10 ⁶ std m ³]	-2
	3. Possible	[10 ⁶ std m ³]	-3
20	Gas reserves	
20	1. Abandon condition	is	
	60 or 20 ksc		- 1
- · ·	1- Proved		-1
	1. Primary	[10 ⁶ std m ³]	yan aran ara ≞1 a
	2. Secondary	[10 ⁶ std m ³]	-2
	3. Tertiary	[10 ⁶ std m ³]	-3
	2- Probable		2
		[10 ⁶ std m ³]	-1
	1. Primary	(10 ⁶ std m ³)	-2
	2. Secondary	[10 std m ³]	
	3. Tertiary	(Ly sta m j	- 3

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No.	Item name		(Refer t		
20	3- Possible			20-7-1-3	
	1. Primary	[10 ⁶ std m	³]	•	-1
	2. Probable	[10 ⁶ std m	³]	1.0	-2
	3. Possible	(10 ⁶ std m	³] .	ette i i	-3
	2. Abandon condition is			·	
	30 or 10 ksc			-2-1	
	1- Proved				-1
	1. Proved	(10 ⁶ std m	a ³]	· · ·	-1
	2. Probable	[10 ⁶ std m	n ³]		-2
	3. Possible	(10 ⁶ std m	n ³]	3 -	-3
	2- Probable				-2
	1. Proved	[10 ⁶ std n	n ³]	· ·	-1
	2. Probable	[10 ⁶ std m	n ³]		-2
	3. Possible	[10 ⁶ std r	n ³]		-3
	3- Possible		<u>.</u>	1	-3
	1. Proved	(10 ⁶ std r	n ³]	-	-1
	2. Probable	(10 ⁶ std r	n ³]		-2
	3. Possible	(10 ⁶ std r	n ³]		-3
21	Yearly gas production			-8	. "
	1. From primary recovery	(10 ⁶ std_r	n ³]	-1	
	2. From secondary recove		_	:	
		(10 ⁶ std 1		-2	
	3. From tertiary recover	y(10 ⁶ std i	a ³]	3	,
22.	Yearly gas injection			-9	e Hara
	1. To primary recovery			-1	
	2. To secondary recovery	[10 ⁶ std	m ³) se	-2	
	3. To tertiary recovery	(10 ⁶ std i	m ³]	-3	
23	Reservoir parameter for	gas			
	cap zone or gas reservoi	r		-10	
	1. Areal extend				
	1. Proved	[ha]			-1
	2. Probable	(ha)	5. A. S.		-2
	3. Possible	[ha]	, sta is <u>i</u>	La traticatori	-3
	en e		<u>e</u> 1 1 -	the an off	

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No.	Item name	Unit	Item number
	بوجو ورجا ها با	۲) 	Réfer to data structu
	i të çahëstar nga ja jarar e të e.		
	2. Net bulk rock volume	t inter inter	F 120-10-2
	1. Proved	[10 ⁶ std m ³]	
	2. Probable	[10 ⁶ atd m ³]	-2
	3. Possible	[10 ⁶ std m ³]	-3
	3. Weighted average porc	sity	10-3
	1. Proved	[Fraction]	-1
	2. Probable	[Fraction]	-2
	3. Possible	[Fraction]	-3
	4. Weighted average wate	er	
	saturation		-4
	1. Proved		-1
	2. Probable		-2
	3. Possible		-3
	5. Weighted average gas		
	oil ratio		-5
	1. Proved	[std m ³ /std	m ³) -1
	2. Probáble	[std m ³ /std	m ³] -2
	3. Possible	[std m ³ /std	m ³] -3
	6. Expansion factor		-6
	1. Initial	[std m ³ /std	m ³] -1
	2. 60 or 20 ksc	[std m ³ /std	m ³) -2
	3. 30 or 10 ksc	(std m ³ /std	· · · ·
	7. Fractional gas		-7
	8. Abandon condition		-8
	1. High pressure		-1
	2. Low pressure		-2
24	Reference report		-11
	1. Title		-1
	2. Date		2
	3. Reference number		-3
	4. Author		-4
	5. Organization of auth	or	-5
	6. Map date		-6
			~

Remarks

200 j. k.

This is not what is presented as basic output report method in other part. This will not be actually output, but the assignment parameterr and items described above will be made use of to prepare the output report for statistics.

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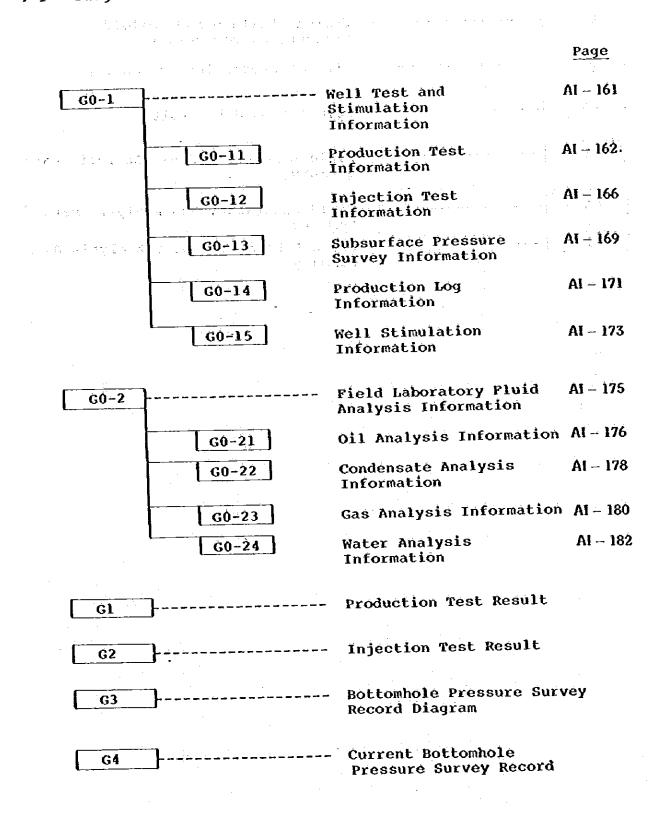
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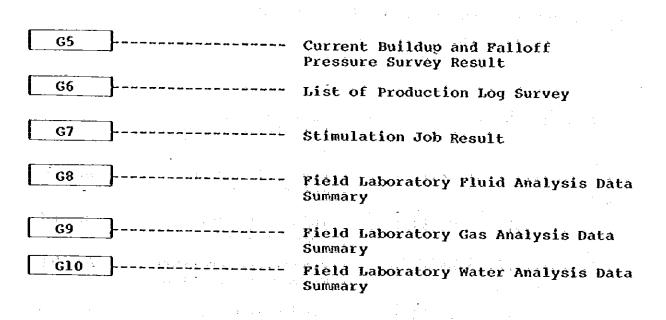
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G-PRODUCTION OPERATION DATA INFORMATION

7



7-1 Diagram Index of Output Reporting Method



1.12

7-2 Conceptual Specification of Output Reporting Method

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METHOD GO-1 WELL TEST AND STIMULATION INFORMATION

· · · · · · · · · · · · · · · ·		
Assignment Parameter		
- Area name		
- Field or prospect name		
- Well name	and the second of the second	
- Workover number	n An an an Anna a	
- Reservoir unit name		
- Layer name		
~ Périod	the second s	
- Kind of production test		
	, an enders spart bar are styp s	
- Kind of injection test		
- Type of injection test		
- Kind of injection fluid		
- Type of subsurface pressure su	rvey	
- Kind of log		
- Objective for stimulation		
- Type of stimulation		
Sorting Paraméter		
Condition of Changing Page		
F Proceeding to the next test	and the second second	
	(1,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2	
Output Item	1 = 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 +	
Output items for this method cor	sist of:	
- Items in METHOD G0-11 (Page A)		
- Items in METHOD G0-12 (Page A		
- Items in METHOD GO-13 (Page A		
- Items in METHOD G0-14 (Page A	t-147)	
- Items in METHOD GO-15 (Page A	I-149)	
However, consideration would be	taken to avoid improper	
repetition of data item.		
Remarks		
(A) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1		

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METHOD G0-11 PRODUCTION TEST INFORMATION

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Assignment Parameter

- Area name
- Pield or prospect name
- Well name
- Workover number
- Reservoir unit name
- Pormation name
- Layer name
- Period
- Kind of production test
- Type of production test

Sorting Parameter

Condition of Changing Page

- Proceeding to the next test

Output Item

No.	Itém name	Unit	Item number (Refer to data structure)
1	Test name	i i i i	G100-1
2	Proviace name		
3	Area name		-4
4	Field office name		 −5 1,2,1,2
5	Field or prospect name		-6
6	Well name		· · · · · · · · · · · · · · · · · · ·
7	Workover number		· •
8	String name		•
9	Kind of completed zone	n in the second seco	
10	Well status		11
11	Parmation news		-12
12	Reservoir unit name		-13
13	Layer name	production of the second	a o 4 1 A de 1 4 414
14	Test period		-15
15	Test interval	[m]	G11044
16	Surveyor		G100-16

	Item name	Unit	Item number (Refer to data structure)
17	Kind of production test		G110-1
18	Type of production test		-2
19	With or without bottom hole pressure survey		-3
20-	Test record		-5
× 1	With or without bottomhole sampling		-1
2	Bottomhole shut-in pressure	[kg/cm ²]	-2
3	Bottomhole flowing pressure	[kg/cm ²]	-3
4	Average préssure traverse in tubing	[kg/cm ²]	
5	Bottomholé temperature	{°C}	
21-	Choke size	(mm)	G111-1
22	Plowing method for test		-2
23-	Plow rate		-3
1	0i1	[stđ m ³ /d]) ² - 1
2-	Gas		-2
	High pressure gas	$(10^3 \text{ m}^3/\text{d})$	
	? Medium pressure gas	$(10^3 \text{ m}^3/\text{d})$	
	B Low pressure gas	$[10^3 m^3/d]$	
3	Water cut	[10 ³ m ³ /d	-3
24	Tubing pressure	[kg/cm ²]	-4
25	Casing pressure	[kg/cm ²]	
26	Flow line pressure	[kg/cm ²]	-6
27-	Separator préssúre	• 2	-7
	High préssure	$[kg/cm^2]$	-1
2	Medium pressure	$[kg/cm^2]$	
3	Low pressure	[kg/cm ²]	
28	Vas IIIC yas	(10 ³ m ³ /d	
-	Fluid analysis (Surface sampling fluid)	and ^T ay in	G110-6
1	API oil gravity	[°API]	
j 2	API pour point	[°C]	-2
s) = 3	Water salinity	(ppm)	-3
į. 4	Gas gravity	[Air=1]	-4

No.	Item name	Item n Unit (Référ t struc	o data
29-5	Gas main component	Ġ110	-6-5
1.	H ₂ S	[% Vol]	-1
2.	co ₂	[% Vo1]	-2
3.		[% Vo1]	-3
4.	N2	[% Vol]	-4
5.	-	(% Vol)	5
6.	c_2	[% Vo1]	~6
7.	C ₃	(% Vol)	-7
8.	C ₄	[% Vol]	-8
9.	c ₅₊	[% Vol]	-9
10.	Other components	[% Vo1]	-10
30-	Test analysis result		-7 -
1	P*	[kg/cm ²]	-1
2	Plow capacity (Kh)	[millidarcy m]	
3	Permeability (K)	[millidarcy]	-3
4	Skin factor (S)		-4
5	Damage ratio (DR)	[%]	-5
6-	Productivity index (PI)		-6
l	Ideal	in case of oil	-1
	1.1	[std m ³ /d/kg/cm ²]	· -
		in case of gas	
	т. <mark>-</mark> к	$(10^{3} \text{ std } \text{m}^{3}/\text{d/cm}^{2})$	
2	Actual	in case of oil	-2
		$[std m^3/d/kg/cm^2]$	-
	··· ·	in case of gas	
		$(10^3 \text{ std } \text{m}^3/\text{d/kg/cr})$	nl
7	Plow efficiency	[std m ³ /d]	-7
8	Qo max	$(std m^3/d)$	-8
9	Absolute open flow potential		-9
31-	Reference report		-8
1-	Plow test report	a da ser a companya da ser a companya A companya da ser a co	•
- 1	_		
2	Date		-1
3	Reference number		
4	Author		-4
5	Organization of author		-9 -5

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No.	Item name	Item number Unit (Refer to data structure)
31-2-	Pluid analysis report	G110-8-2
1	Title]
2	Date	
3	Référènce numbér	The second s
4	Author	
5	Organization of author	
3-	Flow test analysis report	
1	Title	teria a seria a seria. [→
2	Date	
3	Référence number	
4	Authou	
5	Organization of author	na se a se

Remarks

		4 2 June	Na parata T	i _	•
			t i stati	141 J. J. J.	
·				-	÷ .

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METHOD GO-12 INJECTION TEST INFORMATION

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Assignment Parameter

- Area name
- Field or prospect name
- Well namë
- Workover number
- Reservoir unit name
- Layer name
- Period
- Kind of injection test
- Type of injection test
- Type of injection fluid

Sorting Parameter

Condition of Changing Page

- Proceeding to the next test

Output Item

No.	Item name for output	Unit	Item number (Refer to data structure)
1 2 3	Test name Province name Area name Field office name		G100-1 -3 -4 -5
4 5 6 7	Field office name Field or prospect name Well name Workover number		6 7 8
8 9 10	String name Kind of completed zone Well status		-9 -10 -11
11 12 13	Reservoir unit name Layer name Test period		-13 -14 -15

a de la servición de la servic	Item name for output	Unit	Item number (Refer to dat structure)
14	Tost interval	[m]	G120-4
15	Surveyor	÷	G100-16
16	Kind of injection test		G120-1
17	Type of injection test	<u>.</u>	- <u>-2</u>
18	With or without bottomhole press survey	sure	
19	Kind of injection fluid	an a	
20-	Treatment for injection fluid	-	-6
· 1	With or without filtration		- 1
2	With or without additivies	and a second	-2
21-	Test record	· • ·	-7
<u>.</u> 1	Cumulative injection volume	in case [std m ³ /	of water -1 'd]
		in case (10 ³ std	of gas [m ³ /d]
2 · 2	Average daily injection rate	in case [std m ³ /	of water -2 /d)
• ±		in case [10 ³ sto	
3	Maximum wellhead following pressure	[kg/cm ²]	
4	Maximum bottomhole flowing pressure	[kg/cm ²]	
5	Bottomhole flowing pressure at stabilized condition	[kg/cm ²]	~5
6	Bottomhole temperature (MAX)	[°C]	-6
22-	Test result		-8
1.0	P ★	[kg/cm ²]	-1
2	Plow capacity (kh)	[millida	arcym] -2
3	Permeability (K)	[millida	arcy] -3
4	Skin factor (S)		-4
5	Damage ratio (DR)	(%)	-5
6-	Injectivity index (II)		-6
1	Ideal		of water - /d/kg/cm2]
-			$d m^3/d/kg/cm^2$
2	Actual	[std m ³	of water - /d/kg/cm ²]
		in case (10 ³ st	of gas d m ³ /d/kg/cm ²]

No.	Item name for outp	ut	Unit		Item num (Refer to structur	o data
						~ ~
	Flow efficiency				G120-4	
	Reference report					
1-	Injection test repot	:t		. 1		-1
1	Title				an an an taon a Taon an taon an t	-1 -2
2	Date			·	1. AM 4.4	-2
	Référence number	÷	.	a a t	a total	-4
4	Author of report		1		e e et	-5
5	Organization of auth Injection test analy			at the pr	· . · -	-2
2-	Title	rsis tepor	L		. : : : :	-1
2	Date		1. A. A.	. • *		-2
2	Reference number					-3
4	Author					-4
· 5	Organization of auth	hor	. • .	:		-5
3-	Injection fluid trea					-3
1	Title	-			·	-1
2	Date		1			-2
3	Reference number					-3
: 4	Author				i te si	-4
5	Organization of aut	hor			ie en stationer de la companya de la La companya de la comp	-5
· .		. •••				
Remarks						<u>.</u>
	,			• •	:: ·	• • •
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			-	-	e de la composición d	
. •			$\{x,y\} \in \mathbb{R}^{d_{1}}$	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	e e e e e	
	and an indiana the start of the					s)
		AI - 168				

METHOD G0-13 SUBSURFACE PRESSURE SURVEY INFORMATION

	;		
ssignment Pa	rameter		
- Area n	 ame		
	or prospect name		a se tratte se se se
- Well n			n An an an an Angel an Angel an Angel An Angel an
	oir unit name		
- Layer	name		
- Period		ates Bourden en e	·
- Туре о	f subsurface press	sure survey	
Sorting Param	eter	an a	an an gan an a
			na sa tanàna dia mandritra dia mandritra dia mandritra dia mandritra dia mandritra dia mandritra dia mandritra Ny faritra dia mandritra dia
Condition of	Changing Page		
- Procee	ding to the next t		
2	an a		
Output Item			
No. It	em name for output		(Réfer to data
			ـــــــــــــــــــــــــــــــــــــ
1 Test	name		G100-1
2 Provi	nce		-3
3 Area			-4
4 Field	office		-5
5 Field			-6
6 Well	nane		-7
7 Worko	ver number	· · ·	
8 Strin	g name		-9
9 Kind	of completed zone		- 10
10 Well	status		-12
11 Reser	voir unit name	:;	1
12 Layer	name		n = 14 1. j. n. es 14 1
13 Test	period		
14- Surve	y depth	the states and the second	G130-2
1 BDP	,	(m)	-1
2 Subse	ea depth	(m)	-2
	ea depth n plane depth	(m) (m)	-2 -3

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16 Type of survey G130-1 17- Test record -4 1 Shut-in hours prior to survey [h] -1 2 Bottomhole pressure [kg/cm ²] -2 [Final point in use of buildup survey] 3 Liquid level in subsea depth [m] -3 4 Average pressure gradient for gas colum [kg/cm ² /10m] -4 5 Average pressure gradient for liquid colum [kg/cm ²] -6 18- Test analysis result -5 -5 1 P ⁴ [kg/cm ²] -1 2 Plow capacity (kh) [millidarcy m] -2 3 Permeability (K) [millidarcy] -3 4 Skin factor (S) -4 -4 5 6- Productivity index -6 -6 1 Ideal in case of oil -1 -1 2 Actual in case of oil -2 -2 4 Skim factor (S) -4 -5 -5 -6 1 Ideal in case of oil -1 -1 -2<	No.	Item name for output	Unit	Item number (Refer to data structure)
17-Test record-41Shut-in hours prior to survey[h]-12Bottomhole pressure $[kg/cm^2]$ -2(Final point in use of buildup survey)3Liquid level in subsea depth[m]-34Average pressure gradient for liquid colum-4-45Average pressure gradient for liquid colum-4-56Wellhead pressure $[kg/cm^2/10m]$ -51P*-5-618-Test analysis result-5-51P*(kg/cm²]-12Plow capacity(kh)[millidarcy]-33Permeability(K)[millidarcy]-34Skin factor(S)-45Damage ratio(DR)[%]-56-Productivity index-6-11Idealin case of oil (st m³/d/kg/cm²]-12Actualin case of oil (st m³/d/kg/cm²]-27Flow efficiency-7-28Qo max[std m³/d]-89Absolute open flow potentialin case of gas (l0³ std m³/d]-119-Pressure element-6-11Date of last calibration-1-12Pressure element-3-33Type of pressure element-3-3	16	Type of survey		
2Bottomhole pressure (Final point in use of buildup survey)-23Liquid level in subsea depth $[m]$ -34Average pressure gradient for liquid colum $[kg/cm^2/10m]$ 5Average pressure gradient for liquid colum-56Wellhead pressure $[kg/cm^2]$ 7P* $[kg/cm^2]$ 1P*-61P* $[kg/cm^2]$ 2Plow capacity (kh) 3Permeability (K) 4Skin factor (S) 5Damage ratio-61Ideal $[std m^3/d/kg/cm^2]$ 1Idealin case of oil $[sd m^3/d/kg/cm^2]$ 2Actualin case of oil $[sd m^3/d]/kg/cm^2]$ 3Prow efficiency-78Qo max $[std m^3/d]$ 9Absolute open flow potentialin case of gas $[10^3 std m^3/d]$ 19-Pressure element-23Type of pressure element-34Star and and an analyziz3Type of pressure element-3	17-	Test record		4
(Pinal point in use of buildup survey)3Liquid level in subsea depth[m]-34Average pressure gradient-4for gås colum[kg/cm²/10m]5Average pressure gradient-5for liquid colum[kg/cm²]-66Wellhead pressure[kg/cm²]-11P*[kg/cm²]-12Plow capacity (kh)[millidarcy]-33Permeability (k)[millidarcy]-34Skin factor (S)-45Damage ratio (DR)[%]-56Productivity index-61Idealin case of oil (10 ³ std m³/d/kg/cm²]2Actualin case of gas [10 ³ std m³/d]-89Absolute open flow potentialin case of gas [10 ³ std m³/d]-919-Pressure element-6-71Date of last calibration-1-12Pressure element-3-31Date of pressure element-3-31Std m³/d]-3-3	1	Shut-in hours prior to survey	[h]	-1
4 Average pressure gradient for gas colum -4 6 Average pressure gradient for liquid colum -5 6 Wellhead pressure (kg/cm²/10m) 6 Wellhead pressure -5 1 P* (kg/cm²) -6 18- Test analysis result -5 1 P* (kg/cm²) -1 2 Plow capacity (kh) (millidarcy) -3 4 Skin factor (S) -4 -4 5 Damage ratio (DR) (B) -5 6 Productivity index -6 -6 -6 1 Ideal (acase of oil) -1 2 Actual in case of oil -2 2 Actual in case of gas -2 1 Ideal -2 (sd m³/d/kg/cm²) -2 2 Actual -7 (sd m³/d) -8 -8 -8 -9 103 std m³/d) -8 -1 -2 -2 -2 -2 -2 -3 -3 -3	2			- -2
for gas colum[kg/cm²/10m]5Average pressure gradient for liquid colum-56Wellhead pressure[kg/cm²]7P*-61P*-51P*[kg/cm²]2Plow capacity(kh)3Permeability(K)4Skin factor(S)5Damage ratio(DR)6Productivity index-61Idealin case of oil1Ideal-52Actualin case of oil2Actual-61Idealin case of oil2Actual-73Qo max-79Absolute open flow potentialin case of gas19-Pressure element-61Date of last calibration-12Pressure element-23Type of pressure element-3	3	Liquid level in subsea depth	[m]	-3
for liquid colum[kg/cm²/10m]6Wellhead pressure[kg/cm²]1P*-51P*-52Plow capacity (kh)[millidarcy]3Permeability (K)[millidarcy]4Skin factor (S)-45Damage ratio (DR)[%]1Ideal[%]6Productivity index-61Ideal[%]2Actualin case of oil (10 ³ std m³/d/kg/cm²]7Plow efficiency-78Qo max-79Absolute open flow potential-61Date of last calibration-12Pressure element-61Date of pressure element-63Type of pressure element-34Actual-3	4		[kg/cm ² /]	
18-Test analysis result -5 1P* $[kg/cm^2]$ -12Plow capacity (kh) $[millidarcy m]$ -23Permeability (K) $[millidarcy]$ -34Skin factor (S)-45Damage ratio (DR) $[\$]$ -56-Productivity index-61Idealin case of oil $[std m^3/d/kg/cm^2]$ 2Actualin case of gas $[10^3 std m^3/d/kg/cm^2]$ 7Plow efficiency-78Qo max-79Absolute open flow potentialin case of gas $[10^3 std m^3/d]$ 19-Pressure element 1-61Date of last calibration 2-12Pressure element -3 -34Std m^3/d]-35-1-26Pressure element -3 -3	5			-5
1 P* [kg/cm ²] -1 2 Plow capacity (kh) [millidarcy m] -2 3 Permeability (K) [millidarcy] -3 4 Skin factor (S) -4 5 Damage ratio (DR) [8] -5 6- Productivity index -6 1 Ideal [n case of oil -1] 2 Actual in case of oil -2 2 Actual in case of oil -2 2 Actual in case of oil -2 10 ³ std m ³ /d/kg/cm ²] in case of gas [10 ³ std m ³ /d/kg/cm ²] 7 Plow efficiency -7 8 Qo max [std m ³ /d] -8 9 Absolute open flow potential in case of gas -9 -9 10 ³ std m ³ /d] -8 -1 -1 19- Pressure element -6 -1 1 Date of last calibration -1 -1 2 Pressure element number -2 -3 3 Type of pressure element -3 -3	6	Wellhead pressure	$[kg/cm^2]$	6
1 1 1 1 2 Plow capacity (kh) [millidarcy m] -2 3 Permeability (K) [millidarcy] -3 4 Skin factor (S) -4 5 Damage ratio (DR) [%] -5 6 Productivity index -6 -6 1 Ideal [%] -5 6 Productivity index -6 -6 1 Ideal [%] -1 2 Actual in case of oil -2 1 Ideal [%] -2 2 Actual in case of oil -2 1 n case of gas [10 ³ std m ³ /d/kg/cm ²] -2 1 n case of gas [10 ³ std m ³ /d/kg/cm ²] -3 3 Absolute open flow potential -6 -1 1 Date of last calibration -1 -2 2 Pressure element -3 -2 -3 3 Type of pressure element -3 -3 -1	18-	-		-5
3 Permeability (K) [millidarcy] -3 4 Skin factor (S) -4 5 Damage ratio (DR) [3] -5 6 Productivity index -6 -6 1 Ideal [std m³/d/kg/cm²] -1 2 Actual in case of oil -2 2 Actual in case of gas 10 ³ std m³/d/kg/cm²] 7 Plow efficiency -7 -7 8 Qo max -8 -9 9 Absolute open flow potential in case of gas -9 19- Pressure element -6 -6 1 Date of last calibration -1 -1 2 Type of pressure element -3 -3	1	P* -	[kg/cm ²]	14.2 1 : -1
 4. Skin factor (S) 5. Damage ratio (DR) 6. Productivity index 1. Ideal 2. Actual 2. Actual 3. Qo max 9. Absolute open flow potential 1. Date of last calibration 2. Pressure element 3. Type of pressure element 4. Skin factor (S) 4. Skin factor (S) 4. Skin factor (DR) 55 6. Productivity index 6. (%) 6. (%) 7. Flow efficiency 8. Qo max 9. Absolute open flow potential 19- Pressure element 1. Date of last calibration 2. Pressure element 3. Type of pressure element 4. Pressure element 5. Pressure element 6. Skin (Actual Actual Actual	2	Flow capacity (kh)	-	-
5 Damage ratio (DR) [%] -5 6- Productivity index -6 1 Ideal in case of oil [10] 2 Actual in case of gas [10] 2 Actual in case of oil [10] 7 Plow efficiency -7 8 Qo max -7 9 Absolute open flow potential in case of gas [10] 19- Pressure element -6 1 Date of last calibration -1 2 Pressure element number -2 3 Type of pressure element -3 4 Adapted and adapted adapted adapted and adapted adapted adapted adapted a	3	-	(millida)	rcy)
 6- Productivity index 1 Ideal 2 Actual 2 Actual 7 Plow efficiency 8 Qo max 9 Absolute open flow potential 19- Pressure element 1 Date of last calibration 2 Pressure element number 3 Type of pressure element 4 Additional and an analysis of the statement 4 Additional and analysis of the statement 6 In case of oil -1 [std m³/d/kg/cm²] 19- Pressure element 1 Date of last calibration 2 Pressure element 3 Type of pressure element 4 Additional analysis of the statement 4 Additional analysis of the statement 7 Additional analysis of the statement 9 Absolute open flow potential 19- Pressure element 10 Addition 10 Addition 10 Addition 11 Addition 12 Addition 13 Addition 14 Addition 15 Addition 16 Addition 17 Addition 18 Addition 19 Addition 19 Addition 10 Addition 11 Addition 12 Addition 13 Addition 14 Addition 15 Addition 16 Addition 17 Addition 18 Addition 19 Addition 10 Addition 11 Addition 12 Addition 13 Addition 14 Addition 14 Addition 15 Addition 16 Addition 17 Addition 18 Addition 19 Addition 10 Addition<td>4</td><td>Skin factor (S)</td><td></td><td>. – .</td>	4	Skin factor (S)		. – .
1 Ideal in case of oil -1 1 Ideal in case of oil -1 2 Actual in case of gas [10 ³ std m ³ /d/kg/cm ²] 2 Actual in case of oil -2 2 Actual in case of oil -2 3 Pressure element -7 -7 4 Joate of last calibration -9 -9 1 Date of last calibration -1 -1 2 Pressure element -2 -3 3 Type of pressure element -3 -3	÷ 5	Damage ratio (DR)	[8]	-5
2 Actual [std m³/d/kg/cm²] 2 Actual in case of gas 2 Actual in case of oil 2 Actual in case of oil 3 Plow efficiency -7 8 Qo max -7 9 Absolute open flow potential in case of gas 19- Pressure element 1 Date of last calibration 2 Pressure element 3 Type of pressure element 3 Type of pressure element 1 aig for anti-2 1 aig for anti-3	6-	Productivity index		-6
 2 Actual 2 Actual 2 Actual 3 Plow efficiency 9 Absolute open flow potential 19- Pressure element 1 Date of last calibration 2 Pressure element number 3 Type of pressure element 4 Pressure element 5 Pressure element 6 Pressure element 7 Plow efficiency 8 Qo max 9 Absolute open flow potential 19- Pressure element 103 std m³/d/kg/cm² 19- Pressure element 104 end flast calibration 19 Pressure element 105 std m³/d 107 std m³/d 108 efficiency 109 flast calibration 100 efficiency 101 efficiency 102 efficiency 103 efficiency 104 efficiency 105 efficiency 106 efficiency 107 efficiency 108 efficiency 109 efficiency 100 efficiency 100 efficiency 100 efficiency 100 efficiency 101 efficiency 102 efficiency 103 efficiency 104 ef	1	Ideal		
19- Pressure element 1 Date of last calibration 2 Pressure element number 3 Type of pressure element 3 Type of pressure element			in case [10 ³ std	of gas m ³ /d/kg/cm ²)
7 Plow efficiency 8 Qo max 9 Absolute open flow potential 19- Pressure element 1 Date of last calibration 2 Pressure element number 3 Type of pressure element 1 Image: Addition 2 Pressure element 3 Type of pressure element 1 Absolute open flow potential	2	Actual		
8 Qo max 9 Absolute open flow potential 19- Pressure element 1 Date of last calibration 2 Pressure element number 3 Type of pressure element 4 Absolute open flow potential 1 Date of last calibration 2 Pressure element number 3 Type of pressure element 4 Absolute open flow potential 4 Absolute open flow potential 1 Date of last calibration 2 Pressure element number 3 Type of pressure element 4 Absolute open flow potential 4 Abs				
 9 Absolute open flow potential in case of gas as -9 (103 std m3/d) 19- Pressure element 1 Date of last calibration 2 Pressure element number 3 Type of pressure element 1 Experiment <l< td=""><td>7</td><td>Flow efficiency</td><td></td><td>-7</td></l<>	7	Flow efficiency		-7
19- Pressure element Image: Std m ³ /d] Image: Std m ³ /d] 19- Pressure element Image: Std m ³ /d] Image: Std m ³ /d] 2 Pressure element number Image: Std m ³ /d] Image: Std m ³ /d] 3 Type of pressure element Image: Std m ³ /d] Image: Std m ³ /d] 11 Date of last calibration Image: Std m ³ /d] Image: Std m ³ /d] 2 Pressure element number Image: Std m ³ /d] Image: Std m ³ /d] 3 Type of pressure element Image: Std m ³ /d] Image: Std m ³ /d] 11 Image: Std m ³ /d] Image: Std m ³ /d] Image: Std m ³ /d] 12 Pressure element Image: Std m ³ /d] Image: Std m ³ /d] 13 Type of pressure element Image: Std m ³ /d] Image: Std m ³ /d] 11 Image: Std m ³ /d] Image: Std m ³ /d] Image: Std m ³ /d] 11 Image: Std m ³ /d] Image: Std m ³ /d] Image: Std m ³ /d] 12 Image: Std m ³ /d] Image: Std m ³ /d] Image: Std m ³ /d] 13 Type of pressure element Image: Std m ³ /d] Image: Std m ³ /d] 14 Image: Std m ³ /d]<	8	Qo max	•	and the second
19- Pressure element Mark Mark Mark Mark Mark Mark Mark Mark	9	Absolute open flow potential	in çase [10 ³ std	of gas -9 m ³ /d]
1 Date of last calibration Bestered total -1 1 2 Pressure element number D/A -1 1 3 Type of pressure element D/A -2 1 1 E Branch and total -2 1 2 Pressure element D/A -2 1 3 Type of pressure element D/A -3 1 2 E -3 1 1 1 2 E E -3 1 1 2 E E E 2 1 1 3 Type of pressure element D/A E -3 1 1 2 E E E E 2 1 <t< td=""><td>19-</td><td>Pressure element</td><td></td><td></td></t<>	19-	Pressure element		
2 Pressure élément numbér 3 Type of pressure élément 1 Pressure élément 2 Pressure	1,	Date of last calibration	:	europerstand <mark>-1</mark> a É ^{la}
	2	Pressure element number		· -
	3	Type of pressure element		
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METHOD GO-14 PRODUCTION LOG INFORMATION

Assignment Parameter - Area name - Field or prospect name - Well name - Workover number - Reservoir unit name - Layer name - Period - Kind of production log

Sorting Parameter

Condition of Changing Page

- Proceeding to the next test

Output Item

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No.	Item name for output	Unit	Item number (Refer to data structure)
1	Test name		G100-1
2	Province name		-3
3	Area name		-4
4	Field office name		-5
5	Field or prospect name		-6
6	Well name		-7
7	Workover number		-8
8	String name		-9
9	Kind of completed zone		-10
10	Well status		-11
11	Reservoir unit name		-13
12	Layer name		-14
13	Test period		-15
14	Test interval	[m]	G140-4
15	Surveyör		G100-16

No.	Item name for output	Unit	Itém number (Réfer to data structure)
16	Log identification number		G140-1
17	Run number		-2
18	Kind of production log		-3
19-	Reference réport	. '	-5
1	Title		-1
2	•Dâte		-2
3	Réferènce number	-	-3
4	Author		-4
5	Organization of author	· · ·	-5
emarks	<u>.</u>		
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	and the second second	
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METHOD G0-15. WELL STIMULATION INFORMATION

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	See A set of the se	and the second
Assignment: Parameter		
- Area name	· · · · · · · · ·	i.
- Field or prospect name - Well name	and the second second second second	
- Workover number		1.
- Reservoir unit name - Layer name		
- Period	A share the standard standard for the	•
- Objective for stimulation - Type of stimulation	1.11111111111111111111111111111111111	
	and the second	
Sorting Parameter		á.
	$(A, \underline{z}) \in \mathcal{D}_{1}$	I.
Condition of Changing Page	$\mathbf{y}_{1} = \left\{ \mathbf{y}_{1}, \dots, \mathbf{y}_{n} \in \left\{ \mathbf$	

- Proceeding to the next

Output Item

No. Item name for output Unit Item number (Refer to data structure) 1 Stimulation name G100-1 2 Province name -3 3 Area name -4 - 4 Field office name -5 5 Field or prospect name -6 6 Well name -7 7 Workover number -8 8 String name -9 9 Kind of completed zone -10 10 Well status -11 11 Reservoir unit name -13 12 Layer name -14 13 Test period -15 14 Treatment internal [m] G150-3 Service contractor 15 G100-15 16 Objective for stimulation G150-1 17 Type of stimulation -2

No.	Item name for output	Unit	Item number (Refer to data
18-	Treatment fluid		G150-4
1	Туре		-1
2	Main additives		-2
3	Volume	(m ³)	-3
19-	Summary of treatment		-5
20-	Well Stimulation report		-6
1	Title		-1
2	Date		-2
3	Référènce numbèr		-3
4	Author		-4
5	Organization of author		-5

Remarks

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METHOD G0-2 FIELD LABORATORY FLUID ANALYSIS INFORMATION

Assignment Parameter

- Area
- Field or prospect name
- Well name
- Workover number
- Reservoir unit name
- Layer name
- Period

Sorting Parameter

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Conditions of Changing Page

- Proceeding to the next analysis

Output Item

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Output items for this method consist of;

- Items in METHOD G0-21 (Page AI-152) - Items in METHOD G0-22 (Page AI-154) - Items in METHOD G0-23 (Page AI-156) - Items in METHOD G0-24 (Page AI-158)

However consideration should be taken to avoid improper repetition of data item.

Remarks

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METHOD GO-21 OIL ANALYSIS INFORMATION

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Assignment Parameter

- Area name
- Field or prospect name
- Well name
- Workover number
- Reservoir unit name
- Layer name
- Period
- Sorting Parameter

Conditions of Changing Page

- Proceeding to the next Analysis

Output Item

NO.	Item name for output	Unit	Itém numbér (Refer to data structure)
1	Analysis identification		G200-1
2	Province name		-3
3	Area name		-4
4	Field office name		-5
5	Field name		-6
6	Well or station name		-7
7	Workover number		-8
8	Reservoir unit name		-9
9	Layer name		-10
10	Kind of sampling place		-11
11	Sampling date		-12
12-	Sampling condition		-13
1	Pressure	$[kg/cm^2]$	-1
2	Temperature	[°C]	-2
13	Analysis date		-14
14-	Reference report		-15
1	Title		-1
2	Date		-2
3	Reference No.		~3
4	Author		-4
5	Organization of author		5

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No.	Item name for output	Unit	Item number (Refer to data structure)
15	Location of laboratory		G200-16
16	API gravity	[°API]	G210-1
17	Pour point	[°C]	-2
18	Water and sediment	(%)	-3
19	Water content	[%]	-4

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Remarks

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METHOD G0-22 CONDENSATE ANALYSIS INFORMATION

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Assignment Parameter

- Area name
- Field or prospect name
- Wéll name
- Workover number
- Reservoir unit name

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- Layer name
- Period

Sorting Parameter

Conditions of Chaning Page

- Proceeding to the next Analysis

Output Item

No.	Item name for output	Unit	Itém number (Référ to data
1	Analysis identification		G200-1
2	Province name		-3
3	Area name		-4
4	Field office name		-5
5	Field name		-6
6	Well or station name		-7
7	Workover number		-8
8	Reservoir unit name		-9
9	Layer name		-10
10	Kind of sampling place		-11
11	Sampling date		-12
12-	Sampling condition		-13
1	Préssure	[kg/cm ²]	-1
2	Temperature	(°C)	-2
13	Analysis date		-14
14-	Reference report		-15
1	Title		-1
2	Date		-2
3	Reference number		-3
4	Author		4
5	Organization of author		-5

No.	Item name for output	Unit	Item number (Refer to data
15 16 17 18 19	Location of laboratory API gravity Pour point Water and sediment Water content	[°API] [°C] [%] [%]	G200-16 G220-1 -2 -3 -4

Remarks

-

METHOD GO-23 GAS ANALYSIS INFORMATION

Assignment Parameter

- Area name

- Field or prospect name

- Well name Workover number
- Reservoir unit name
- Layer name
- Period

Sorting Parameter

Condition of Changing Page

- Proceeding to the next Analysis

Output Item

No.	Item name for output	Unit	Itêm numbêr (Refer to data structure)
1	Analysis identification		G200- 1
2	Province name		- 3
3	Area name		- 4
4	Field office name		- 5
5	Field name		- 6
6	Well or station name		- 7
7	Korkover number		- 8
8	Reservoir unit name		- 9
9	Layer name		-10
10	Kind of sampling place		-11
11	Sampling date		-12
12-	Sampling condition	· · ·	-13
1	Pressure	[kg/cm ²]	-1
2	Temperature	[°C]	-2
13	Analysis date		-14
14-	Reference report		-15
1	Title		-1
2	Date		-2

No.	Item name for output	Unit	Item number (Refer to data
14 - 3	Reference number	. · · · ·	G200-15- 3
	Author		- 4
	Organization of author		
	Location of laboratory		-16
16	Specification gravity	×	G230- 1
	Gas component	t al constructions	- 2
~ 1	H ₂ S	[% Vol]	en star sin e 1
	co ₂	[% Vol]	– 12
	0 ₂	(% Vol)	- 3
- 4	N ₂	(% Vol)	· 말 · · 기 · · · · · · · · · · · · · · ·
- 5	c ₁	[% Vol]	- 5
- 6	c ₂	[% Vol]	an 15 a k⊟r <mark>6</mark> a
- 7		[% Vol]	- 11 - 7
- 8	i ^Č 4	(% Vol)	- 8
- 9	n ^C 4	[% Vol]	- 9
-10	i ^C 5	[% Vol]	-10
-11	Ċ	(% Vol)	-11
-12		[% Vol]	-12
-13	Other components	• • • • • • • • •	-13
18 👘	Gross heating value	[Btu/scf	- 3
19	Net calorific value	[kg.cal/	'kg] - 4
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			$A = \left\{ \begin{array}{c} 1 & 1 \\ -\frac{1}{2} & \frac{1}{2} \\ -\frac{1}{2} & \frac{1}{2} \\ -\frac{1}{2} \\ -\frac$
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METHOD G0-24 WATER ANALYSIS INFORMATION

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Assignment Parameter

- Area name
- Field or prospect name
- Well name
- Workover number
- Reservoir unit name
- Layer name
 - Period

Sorting Parameter

Condition of Changing Page

- Proceeding to the next Analysis

Output Item

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No.	Item name for output	Unit	Item number (Refer to data structure)
د در بر ت ت در مر ر			
1 -	Analysis identification		G200-1
2	Province name	$T_{\rm eq} = 0 \text{and} T_{\rm eq} = 0$	-3
3	Area name		-4
4	Field office name	•	-5
5	Field name		-6
6	Well or station name		-7
7	Workover number		-8
8	Reservoir unit name		-9
9	Layer name		-10
10	Kind of sampling place		-11
11	Sampling date		-12
12-	Sampling condition		-13
1	Pressure	$[kg/cm^2]$	-1
2	Temperature	[°C]	-2
13	Analysis date		-14

No.	Itém name for output	Unit	Item number (Refer to data structure)
14-	Reference report		G200-15
1	Title	·	-1
2	Date		-2
3	Reference number		-3
4	Author		-4
5	Organization of author		-5
15	Location of laboratory		-15
16-	Component		G240-1
1	Na ⁺	[meq/L]	-1
2	к ⁺	[meq/L]	-2
3	Cå ⁺⁺	[meg/L]	-3
4	Mg ⁺⁺	[meq/L]	-4
5	++ Ba	[meg/L]	-5
6	Fe ⁺⁺⁺	[meq/L]	-6
7	CL_	[meq/L]	-7
8	HCO3	[meg/L]	-8
9	so ₄ =	[meg/L]	-9
10	co ₃ =	(meg/L)	-10
17	Salinity	[ppm]	-2
18	Resistivity	[m]	-3
19	PH		-4
20	Scaling index		-5
21	Suspended solid	{ppm}	-6
22	Disolved solid	(ppm)	-7

Remarks

8 H-PRODUCTION FACILITIES DATA INFORMATION

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Page

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8-2 Conceptual Specification of Output Reporting Method

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METHOD HO-1 STATION GENERAL

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 Pield office name Facilities field name Kind of station Station name Period Conditions of Changing Page Proceeding to the next station Data items for this method consist of; Items in METHOD H0-11 (Page AI-164) and Items in METHOD H0-12 (Page AI-166) However, consideration will be taken to avoid improper repetition of data item. Remarks	ssignment Pa	rameter	et dig i s
 Facilities field name Kind of station Station name Period Conditions of Changing Page Proceeding to the next station Data items for this method consist of; Items in METHOD H0-11 (Page AI-164) and Items in METHOD H0-12 (Page AI-166) However, consideration will be taken to avoid improper repetition of data item. Remarks	- Field	office name	
 Kind of station Station name Period Conditions of Changing Page Proceeding to the next station Data items for this method consist of; Ttems in METHOD H0-11 (Page AI-164) and Items in METHOD H0-12 (Page AI-166) Nowever, consideration will be taken to avoid improper repetition of data item. Remarks	- Facili		
 Period Conditions of Changing Page Proceeding to the next station Dutput Item Data items for this method consist of; Ttems in METHOD H0-11 (Page AI-164) and Items in METHOD H0-12 (Page AI-166) However, consideration will be taken to avoid improper repetition of data item. 	- Kind o		
Conditions of Changing Page - Proceeding to the next station Data items for this method consist of; - Ttems in METHOD H0-11 (Page AI-164) and - Items in METHOD H0-12 (Page AI-166) However, consideration will be taken to avoid improper repetition of data item. Remarks	- Statio	n hame	an a
- Proceeding to the next station Datput Item Data items for this method consist of; - Items in METHOD H0-11 (Page AI-164) and - Items in METHOD H0-12 (Page AI-166) However, consideration will be taken to avoid improper repetition of data item. Remarks	- Period	 Example a state of a second state of the second state	- 11
 Proceeding to the next station <u>Data items for this method consist of;</u> Items in METHOD H0-11 (Page AI-164) and Items in METHOD H0-12 (Page AI-166) However, consideration will be taken to avoid improper repetition of data item. 		-	
<pre>Putput item Data items for this method consist of; - Items in METHOD H0-11 (Page AI-164) and - Items in METHOD H0-12 (Page AI-166) However, consideration will be taken to avoid improper repetition of data item. Remarks </pre>	onditions of	Changing Page	
Data items for this method consist of; - Items in METHOD H0-11 (Page AI-164) and - Items in METHOD H0-12 (Page AI-166) However, consideration will be taken to avoid improper repetition of data item. Remarks	- Proceé	ding to the next station	
- Items in METHOD HO-11 (Page AI-164) and - Items in METHOD HO-12 (Page AI-166) However, consideration will be taken to avoid improper repetition of data item. Remarks	Dutput Item	. ÷.	
and - Itéms in MBTHOD HÓ-12 (Page AI-166) However, consideration will be taken to avoid improper repetition of data item.	Data ite	ms for this method consist of;	
- Itèms in METHOD HO-12 (Page AI-166) However, consideration will be taken to avoid impròper repetition of data item. Remarks		in METHOD H0-11 (Page AI-164)	• * . •
However, consideration will be taken to avoid improper repetition of data item.		in METHOD $H0-12$ (Page $AI-166$)	
<pre>improper repetition of data item. Semarks Semark</pre>	· · · · · · · · · · · · · · · · · · ·		
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<pre>Approx 2.20 Approx 2.20 A</pre>		$r_{1} = \{x_{1}, x_{2}, \dots, x_{n}\} = \{x_{n}\}$	Ĩ
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METHOD HO-11 STATION RESUME

Assignment Parameter

- Field office name
- Facilities field name
- Kind of station
- Station name
- Period (Date of installation)

Conditions of Changing Page

- Proceeding to the next station

Output Item

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No.	Item name Unit	Item number
1	Unit name	
2	Province name	H100-2
3	Pield office name	3
4	Pacilities field name	-4
5	Kind of station	-5
6	Station name	-1
7	Date of delivery	-6
8	Location name (only for offshore in the future)	-7
9	Name of first station and/or well connected to the station	-8
10-	Function and capacity	-9
1	Nain function	-1
2	Désign cápacity	-2
11	Date of operation start-up	-10
12-	Plow diagram	-11
1	Title	-1
2	Date	-2
3	Drawing no.	-3

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13-	Plot plan		H100-1	
1	Title		, so an Bright Start	-1
2	Date		a ser a construction de la constru La construction de la construction d	-
3	Drawing no.		n na star i kung	-
14-	Drawing of pip	ing	terres de la companya de la companya A servició de la companya de la comp	
1	Title	an ja a galat	n de la ante destat	-
2.	Date	t i statistica de la companya de la	· · · · · · · · · · · · ·	
3	Drawing no.		1. aprilation († 16. ∆]	-3 (x) - 25 (c)
15-	Order document			
L	Title		and the second states of	-2
2	Date			
3	Document no.			≥ <u>;</u> −3:: ::: 15
16-	Invoice		-	-1
	Title			-1
2	Dáte			-2
3	Invoice no.			7
17-	Station cost		(US\$)	-1
	US\$		[1000 Rp]	-1 -2
2	Rp	. to stition	(1000 NJ) H120-	-
18	Equipment nam	e in station		L .
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METHOD H0-12 STATION MODIFICATION

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Assignment Parameter	en en de tra	
- Field office name		
- Facilities field name		
- Kind of station		
- Station name		
- Period (End date of modification)		-
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Conditions of Changing Page	the second second second	
- Proceeding to the next station		-
Output Item	and the state of the	•
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No.	Itém name	Unit Ite	n number
1	Unit name	riter Transformer and the	
2	Province name	810	0-2
3	Field office name		-3
4	Pacilities field name		-4
5	Station name		- 1
6	Modification period	HII	Ď-1
7-	Executor		-2
1	Kind of organization		-1
2	Name of organization		-2
8-	Modification cost		-3
1	US\$	(US\$)	-1
2	Rp	[1000 Rp]	-2
9-	Invoice		-4
1	Title		-1
2	Date		-2
3	Invoice no.		-3
10-	Order document		-5
1	Title		-1
2	Date		-2
3	Document no.	a ser a su su su	-3

11-	Report	H110-6
1	Title	H110-6 -1
2	Date	ato a statuto de a ato ato de a −2
3	Report no.	a shakara na shikara ta shi kara shi kara
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METHOD HO-2 EQUIPMENT GENERAL

Assignment Parameter

- ~ Field office name
- Facilities field name
- Kind of station
- Station hame
- Kind of equipment
- Equipment name
- Main specification
- Result of Inspection
- Périod

Conditions of Changing Page

- Proceeding to the next equipment

Output Item

Data items for this method consist of; - Items in METHOD H0-21 (Page AI-146) and - Items in METHOD H0-22 (Page AI-148) However, consideration will be taken to avoid improper repetition of data item.

Remarks

METHOD H0-21 EQUIPMENT RESUME

Assionmen	bill t Paramétér		
	eld office name	1	
	cilities field name	· · · ·	5
	nd of station	: :	
,	ation name	· ·	
-	nd of equipment		
• •	uipment name		
	in specification	1 S. A.	.*
- Pe	riod (Date of installation)		
Condition	s of changing Page	±	
°≠ Pr	oceeding to the next equipment	1877 - 201	-
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Output It	ėm	. "TC ¹¹	÷
			,
No.	Item námé	Unit Ite m	numbér
1			
	Unit name	H200	à
2	Province name Field office name		-z
4	Fleid office name Facilities field name		-3 -4
۹ 5	Station name		-4
5 6	Kind of equipment		-5 -6
0 7	Equipment name (code)		-0 -1 **
-			-1 -7
8° 9–	System code		-8
	Equipment name		-8 -1
1	Name		
2	Popular name		-2
10	Equipment object no.		-9
11	Name of manufacturer		-10
12	Date of installation		-11
13	Name of equipment associated		-12

1 0 2 F 15- J 2 C 3 J 16- 0 1 7 2 F 3 F	Equipment cost US\$ Rp Invoice Fitle Date Invoice no. Order document Fitle Date Document no. Drawing		₩p)
2 F 15- J 2 C 3 J 16- C 1 J 2 F 3 F	Rp Invoice Pitle Date Invoice no. Order document Fitle Date Document no.		Řý] 14 14
15- 1 1 7 2 6 3 1 16- 6 1 7 2 1 3 1 3 1	Invoice Fitle Date Invoice no. Order document Fitle Date Document no.		a (14)
2 E 3 J 16- C 1 J 2 E 3 F	Date Invoice no. Order document Fitle Date Document no.		e no o testo
3 1 16- 0 1 7 2 1 3 1	Invoice no. Order document Fitle Date Document no.		
16- 0 1 7 2 1 3 1	Drder document Fitle Date Document no.		
1 7 2 1 3 1	ritle Date Document no.		e e station <mark>e</mark> j
2 I 3 I	Date Document no.		•
3 I	Document no.	teens koesensen S	91 - 1 1 4 · 생 · 목
17- 1	Drawing		-
	-		16
1 1	Title		
2 I	Date		-:
3 1	Drawing no.		
5	Specification in case of separator		-17
	Type of vessel	· · ·	· · · · · · · · · ·
2 1	Model name		
3 1	Name of fluid treated	·	-
4 1	Volume of vessel	[m ³]	-
5- 1	Flow rate of fluid		-
1	Liquid	[k1/d]	
2 (Gas	[std m ³ /	a]
6 1	Design pressure	[kg/cm ² G]
7	Dimension (OD x S-S x Wi	()	
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METHOD H0-22 EQUIPMENT MAINTENANCE

Assignment Parameter		e* .
		e.
- Field office name	the design of the state of the	
- Facilities field name		Ť.
- Kind of station		- [-
- Station name		:
- Kind of equipment		·.
- Equipment name	•	
- Main specification		- -
- Result of Inspection		2 N 4 N
- Period (Bnd date of work)		

Conditions of Changing Page

- Proceeding to the next equipment

Output Item

No.	Item name	Unit	Item number
° 1	Unit name		
2	Province name		H200-2
3	Pacilities field name		-3
4	Field area name		4
5	Station name		-5
6	Kind of equipment		-6
7	Equipment name (code)		-1
8-	Equipment name		-8
· 1	Name		-1
2	Popular name		-2
9	Equipment object no.		-9
10	Work period		H210-1
11-	Bxecutor		-2
1	Kind of organization		-1
2	Name of organization		-2

No.	Item name	Unit Item number
. 12-	Kind of Work	H210-3
1	Kind of inspection	
2	Kind of repair	- 2
13	Result of inspection	
14-	Maintenance cost	e anta de la cat ri
1	US\$	(US\$)
2	Rp	[1000 Rp] -2
15-	Report	
1	Title	
2	Dàte	the contract sector $1 - 1$, the contract ϵ_{-2} .
3	Report no.	ve saarstel sulla de este -3

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9 I-PIPELINE DATA INFORMATION

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Page

9-2 Conceptual Specification of Output Reporting Method

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METHOD 10-1 PIPELINE GENERAL

Assignment P			e portante a	
	office name	• •		
- Facil	ities field n	ame at pipeline end po	int 👘	-
		at pipeline end po		
		at pipeline end po	int E. E.	
	of line pipe		en e	
- Nomin		- · ·	1 (NA 1913)	
- Pipel	iné name			
- Resul	t of inspectio	Śn de szurzą (dz. jeże + niek nie sął	n i sta	
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- Proce	eding to the		4 1 4. 4 ST	
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utput Item				
Data it	ems for this i	method consist of:		. • .
Data it - Items	ems for this i in METHOD 10	method consist of; -11 (Page AT-177)		• • • • • •
Data it - Items and	ems for this i in METHOD 10	method consist of; -11 (Page AT-177)		
- Items and	in METHOD 10	method consist of; -11 (Page AI-177) -12 (Page AI-179);		
- Items and - Items	in METHOD 10	-11 (Page AI-177) -12 (Page AI-179)	an Antonio Antonio Antonio	2
- Items and - Items However	in METHOD 10 in METHOD 10 , consideratio	-11 (Page AI-177) -12 (Page AI-179) on will be taken to avoid	d improp	2
- Items and - Items Kowever	in METHOD 10 in METHOD 10 , consideratio	-11 (Page AI-177) -12 (Page AI-179)	d improp	2
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- Items and - Items However repetit	in METHOD 10 in METHOD 10 , consideration ion of data in	-11 (Page AI-177) -12 (Page AI-179) For will be taken to avoid tem. (Association of the second for the second of the second of the second of the second of the for the second of the second of the second of the second of the for the second of the for the second of the for the second of the	d improp e Stand	èr :
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METHOD 10-11 PIPELINE RESUME

Assignment	Parameter	
- Fie	ld office name at pipeline end p	ōint
- Pac	ilities field name at pipeline end p	oint
- Kin	d of station at pipeline end p	oint
- Sta	tion name at pipeline end p	oint de serve
- Xin	d of line pipe	n dege Ander Die en
- Nor	inal size	
- Pip	eline name	en de la seconda de
- Per	iod (Date of installation)	
		in the second
Conditions	s of Changing Page	
- Pro	occeeding to the next pipeline	
1 - 1		
Output Ite		
		医基苯乙基 建合成分子
No.	Item name Unit	Item number
1		
	Unit name	
2		1100-2
2 3		1100-2 -3
-	Province name	-3
3	Province name Field office name	-3 -1
3	Province name Field office name Pipeline name	-3 -1
3 4 5-	Province name Field office name Pipeline name End point of pipeline	-3 2 -1 2 -4 yea
3 4 5- 1	Province name Pield office name Pipeline name End point of pipeline Facilities field name Station name	-3 -1 -1 -1
3 4 5- 1 2	Province name Field office name Pipeline name End point of pipeline Facilities field name	-3 -1 -1 -1 -2
3 4 5- 1 2 6-	Province name Field office name Pipeline name End point of pipeline Facilities field name Station name Starting point of pipeline	-3 -1 -1 -2 -5
3 4 5- 1 2 6- 1	Province name Pield office name Pipeline name End point of pipeline Facilities field name Station name Starting point of pipeline Facilities field name	-3 -1 -1 -2 -5 -1
3 4 5- 1 2 6- 1 2	Province name Pield office name Pipeline name End point of pipeline Facilities field name Station name Starting point of pipeline Facilities field name Name of well or station	-3 -1 -2 -3 -1 -2 -3 -1 -2

9-	Major data of pipeline		-8
1	Nominal size	[in]	-1
2	Length of pipeline	[km]	-2
3	Design pressure	[kg/cm ² G]	-3

1Kind-12Specification-213Type of connection-1014Type of valve-1115-Drawing-121Title-12Date-23Drawing no316-Executor-131Kind of organization-217-Pipeline cost-141US\$[US\$]-12Rp[1000 Rp]-218-Invoice-151Title-12Date-23Invoice no319-Order document-161Title-12Date-23Document no3	10-	Line pipe	1100-9	
13Type of connection-1014Type of valve-1115-Drawing-121Title-12Date-23Drawing no316-Executor-131Kind of organization-12Name of organization-217-Pipeline cost-141US\$[US\$]-12Rp(1000 Rp)-218-Invoice-151Title-12Date-23Invoice no319-Order document-161Title-12Date-23Document no3	1			-1
14 Type of walve -11 15- Drawing -12 1. Title -1 2 Date -2 3 Drawing no. -3 16- Executor -13 1 Kind of organization -2 17- Pipeline cost -14 1 US\$ [US\$] -1 2 Rp [1000 Rp] -2 18- Invoice -15 -15 1 Title -1 -1 2 Date -2 -2 3 Invoice no. -3 19- Order document -16 -1 2 Date -2 -2 3 Document no. -3 -3 Permarks -2 -16 -1 2 Date -2 -2 3 Document no. -3 9 Ocument no. -3 9 Ocument no. -3 16 1 -1 <tr< td=""><td>2</td><td>Specification</td><td></td><td>-2</td></tr<>	2	Specification		-2
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3 Drawing no. -3 16- Executor -13 1 Kind of organization -1 2 Name of organization -2 17- Pipeline cost -14 1 US\$ [US\$] -1 2 Rp [1000 Rp] -2 18- Invoice -15 -1 1 Title -1 -3 2 Date -2 -3 3 Invoice no. -3 -3 19- Order document -16 1 Title -1 2 Date -2 3 Document no. -3 Remarks -3 -3	1.	Title	an a	5 -1
16- Executor -13 1 Kind of organization -1 2 Name of organization -2 17- Pipeline cost -14 1 US\$ [US\$] -1 2 Rp [1000 Rp] -2 18- Invoice -15 -1 1 Title -1 -1 2 Date -2 -3 3 Invoice no. -3 -3 19- Order document -16 -1 2 Date -2 -2 3 Document no. -3	2	Date	•	-2
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2 Rp [1000 Rp] -2 18- Invoice -15 -1 1 Title -1 -2 3 Invoice no. -3 -3 19- Order document -16 -1 2 Date -1 -2 3 Invoice no. -3 -3 19- Order document -16 -1 2 Date -2 -3 3 Document no. -3 Remarks -3 -3	17-	Pipeline cost	ралар түрсөн -1	14
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METHOD 10-12 PIPELINE MAINTENANCE

Assignment Parameter

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- Field office name	at pipeline end point
- Facilities field name	at pipeline end point
- Kind of station	at pipeline end point
- Station name	at pipeline end point
- Kind of line pipe	
- Nominal size	-

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- Pipeline name
- Result of inspection
- Period (End date of work)

Conditions of Changing Page

- Proceeding to the next pipeline

Output Item

No.	Item name	Unit	Item number
		•	
1	Unit name		
2	Province name		1100-2
3	Field office name		-3
4	Pipeline name	• . • .	-1
5-	Bnd point of pipeline		-4
1	Facilities field name		
2	Station name		-2
6-	Starting point of pipeline		-5
1	Facilities field name		-1
2	Name of well or station		-2
7	Work period		1110-1
8-	Kind of work		-2
1	Kind of inspection		-1
2	Kind of repair		-2

No.	Item name		، عد قد بند عد وب بند عد عد عد عد	Unit	Item numbér
9-	Executor		1110-3		
1	Kind of organization				-1
2	Name of organization			-2	
10	Position of pipeline inspected and/or repaired			-4	
11	Result of inspection			-5	
12-	Report				-6
ľ	Title				-1
2	Dåte		· · ·		-2
. 3	Report no.				-3
13-	Maintenance	cost			-7
1	Material	US\$		[US\$]	-1
2	Material	Rp		[1000 R	-
3	Work	US\$		[UŠ\$]	-3
4	Work	Rp		[1000 R	p} -4
14-	Invoice				-8
1	Title				-1
2	Date				-2
3	Invoice no.				-3
15-	Order document				-9
1	Title				-1
2	Date				-2
3	Document no	•			-3

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Remarks