

No. 114



THE REPORT OF DETAILED SYSTEM DESIGN  
ON  
THE PETROLEUM EXPLORATION  
AND  
PRODUCTION DATA BANK SYSTEM DEVELOPMENT PROJECT  
IN  
THE REPUBLIC OF INDONESIA  
(VOLUME II)

AUGUST 1981

JAPAN INTERNATIONAL COOPERATION AGENCY

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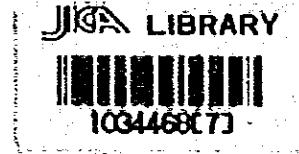
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**APPENDIX III**

**DATA BASE STRUCTURE  
FOR  
THE PETROLEUM EXPLORATION AND PRODUCTION DATA  
BANK SYSTEM OF PERTAMINA UNIT EP-II**



## INTRODUCTORY REMARKS

This APPENDIX shows the segment diagram by data bases and the data format of segments by data bases. Data bases and segments are named and listed in Table 5-1 and Table 5-2 in Chapter V of the text.

Remarks related to this APPENDIX are made as follows.

1. As for "Segment diagram",

- The segment diagram represents a hierarchical structure as "Top to down and left to right".

2. As for "Data format" of segments, the followings are remarked.

- Items in Segment are hierarchically grouped by classification code which is consisted of first code, second code and third code.
- Code number with hyphen (ex. 9-) only symbolizes group of data in minor code number.
- The first item in "Item Name" shows the key item which is used for the purpose of identifying a segment.
- "Field Name" being used in coding the application program by using the COBOL Language, is named by

abbreviating item name. Among the abbreviations the following items are specially remarked for their convenience.

<u>Abbreviation</u>	<u>Description</u>	<u>Abbreviation</u>	<u>Description</u>
CD	Code	NO	Number
CT	Cost	OB	Objective
DT	Date	PD	Period
DP	Depth	SC	Scale
FG	Flag	SZ	Size
HI	Height	ST	Status
ID	Identification	TL	Title
IV	Interval	TY	Type
KD	Kind	VL	Volume
LN	Length	WT	Weight
NM	Name		

- The headword "Position" shows the column number starting data.
- Regarding the headword "Properties", references are made to the following examples.

X(3); area of three digits in character

ex. [A C E]

9(5); area of five digits in numeric number

ex. [1 2 0 6 2]

$9(3) \vee 9(1)$ :

ex.  $\boxed{8} \boxed{3} \boxed{2} \boxed{5}$   
↓  
decimal point

$X(2)^*3$ ; three times occurrence of  $X(2)$

ex.  $\boxed{A} \boxed{B} \boxed{B} \boxed{C} \boxed{A} \boxed{B}$   
1-  $*3$  ; three times occurrence of  $9(5)$  and  $X(8)$

- 1  $9(5)$   
2  $X(8)$

ex.  $\boxed{5} \boxed{2} \boxed{1} \boxed{0} \boxed{3}$   
 $\boxed{A} \boxed{B} \boxed{C} \boxed{D} \boxed{E} \boxed{F} \boxed{G} \boxed{H}$   
 $\boxed{3} \boxed{4} \boxed{2} \boxed{9} \boxed{7}$   
 $\boxed{X} \boxed{Y} \boxed{Z} \boxed{S} \boxed{P} \boxed{R} \boxed{U} \boxed{D}$   
 $\boxed{1} \boxed{8} \boxed{6} \boxed{2} \boxed{3}$   
 $\boxed{Q} \boxed{R} \boxed{S} \boxed{T} \boxed{A} \boxed{B} \boxed{C} \boxed{D}$



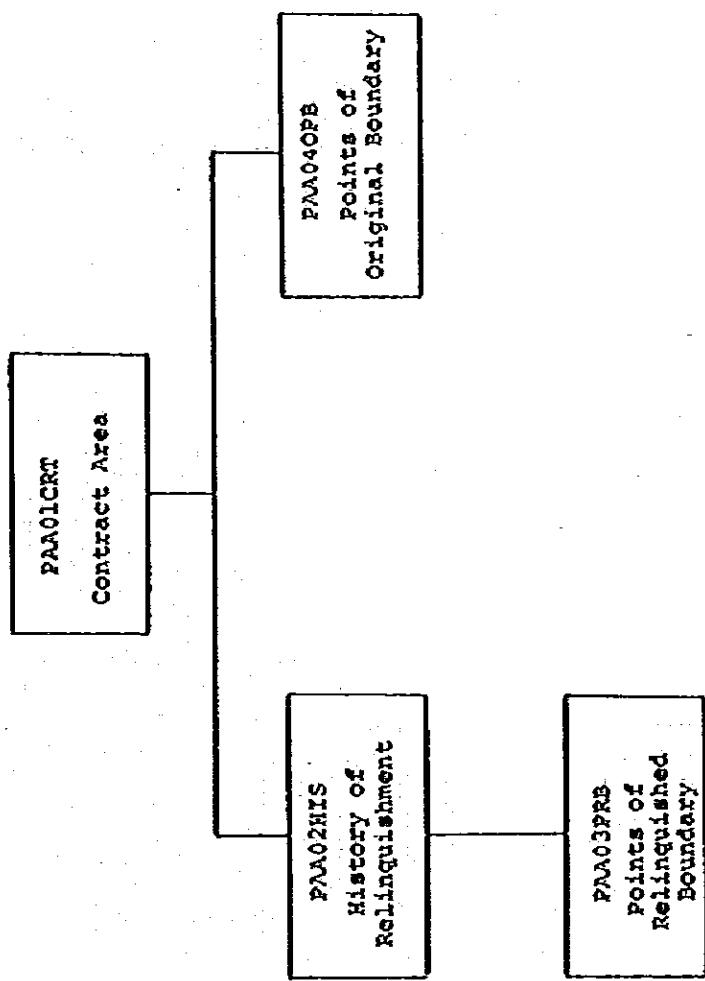
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1-1 Segment Diagram of PAACTR, "Contract Area"

1 PAACTR, "Contract Area"



**1-2 Data Format of PAACTR, "Contract Area"**

- (1) PAA01CRT, "Contract Area"**
- (2) PAA02HIS, "History of Relinquishment"**
- (3) PAA03PRB, "Points of Relinquished Boundary"**
- (4) PAA04OPB, "Points of Original Boundary"**

## (I) PANOCRT, "Contract Area"

Item No.	Item Name	Field Name	Posi. tion	Properties	Remarks
1-	Contract code Kind of contract	[KEY] CONTRACT-CD CONTRACT-KD	1 9(1)		To be coded as in APPENDIX IV To be coded as in APPENDIX IV 1. P.S. contract (PS) 2. Working contract (WK) 3. Joint venture (JV) 4. Technical assistance contract (TA) 5. Other contract (OC)
2	Sequence number	SEQ-NO	2 9(3)		
2	Province code	PROVINCE-CD	5 9(1)*3		To be coded as in APPENDIX IV
3	Date of contract	CONTRACT-DT	8 X(8)		(Started) Ex. XXXX-MM-DD
4	Contract area name	CONTRACT-AREA-NM	16 X(30)		
5-	Agreement Title	AGREEMENT AGREE-TL	46 X(10)		
1	Identification No.	AGREE-IDNO	146 X(15)		
2	Contractor code	CONTRACTOR-CD	161 X(3)	*5	To be coded as in APPENDIX IV
6	Operation	OPERATION	X(3)		
7-	Operator code	OPRAT-CD	164 X(8)		To be coded as in APPENDIX IV Ex. XXXX.MM.DD-XXXX.MM.DD Ex. XXXX.MM.DD-XXXX.MM.DD
1	Operation period	OPRAT-PD	167 X(8)		
2	Period of contract	CONTRACT-PD	259 X(8)		To be coded as in APPENDIX IV
8	Map code	MAP-CD	275 X(10)*2		
9	Original size of contract area	CONTRACT-OSS	295 9(7)V9(2)	[km <sup>2</sup> ]	
10					

## (2) PAAOZHS, "History of Relinquishment"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	No. of times	[KEY]	NO-TIMES	1 9(2)	Ex.YYYY.MM.DD
2	Relinquished date		RELQ-DT	3 X(8)	
3	Relinquished area name		RELQAREA-NM	31 X(20)	
4	Relinquished size of area		RELQAREA-SZ	31 9(7)V9(2)	[km <sup>2</sup> ]
5	Relinquished map code		RELQMAP-CD	40 X(10)*2	To be coded as in APPENDIX IV

(3) PNA03PRB, "Points of Distinguished Boundary"

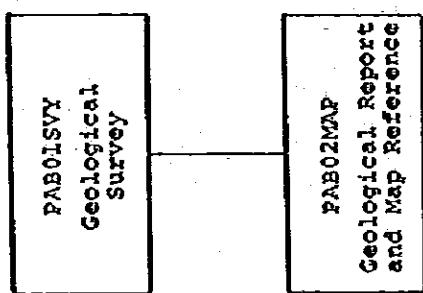
Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Points No.	POINTS-NO	1 2	9(2)	Number of points are less than 100
2	Point name	POINT-NM	3	X(2)	
3	Mercator coordinate	MERC-COORD			
1	Latitude (S)	LATITUDE	5	S9(6)	Ex. 99-99.99
2	Longitude (E)	LONGITUDE	11	S9(7)	Ex. 999.9999

## (4) PMA0408, "Points of Original Boundary"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Points No.	[KEY]	1	9(2)	Number of points are less than 100
2	Point name	POINT-NM	3	X(2)	
3-	Mercator coordinate	MERC-A-COORD			
1	Latitude (S)	LATITUDE	5	S9(6)	Ex. 99.99.99
2	Longitude (E)	LONGITUDE	11	S9(7)	Ex. 999.99.99

2-1. Segment Diagram of PABGLSVY, "Geological Survey"

2 PABGLSVY, "Geological Survey"



**2-2 Data Format of PABGLSVY, "Geological Survey"**

- (1) PAB01SVY, "Geological Survey"**
- (2) PAB02MAP, "Geological Report and Map Reference"**

## (L) FABOLSVY, "Geological Survey"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Survey code Kind of geological survey	[KEY] SURVEY-CD SURVEY-KD	1 X(2)	9(3)	To be coded as in APPENDIX IV
2	Sequence number		3	9(3)	To be coded as in APPENDIX IV
2	Area code	SEQ-NO AREA-CD	6	9(2)	To be coded as in APPENDIX IV
3	Report code	REPORT-CD	8	X(10)	To be coded as in APPENDIX IV
4	Name of locality surveyed	LOCALITY- SURVEYED-NM	18	X(30)	To be coded as in APPENDIX IV
5	Survey period	SURVEY-PD	48	X(8)X(8)	Ex. YYYY.MM.DD-YYYY.MM.DD
5	PERTAINING OR CONTRACTOR	CONTRACTOR-FC	64	9(1)	To be coded as in APPENDIX IV
6	Survey personnel	SURVEY- PERSONNEL	65	X(30)	
7	Company name	COMPANY-NM	95	X(50)	
8	Party month	PARTY-MONTH	145	9(2)	
9	Total travers measured	TRAVERS- MEASURED	147	9(8)	(m)
10	Approximate geological compiled area size	COMPILED-AREA -SZ	155	9(7)V9(2)	[km <sup>2</sup> ]
11	Total drilled depth	DRILLED-DP	164	9(5)	[m] If shallow wells were drilled
12	Total number of shallow wells	SHALLOW-WELLS	169	9(4)	If shallow wells were drilled
13	Total survey cost	SURVEY-CT			
14- 1	RP	RP-CT	173	9(10)	[RP]
2	USS	US-CT	183	9(8)V9(2)	[USS]
15	Exchange rate of RP. to US.\$	EX-RATE	193	9(4)V9(2)	[RP/USS]

**NOTE 1. Kind of Survey**

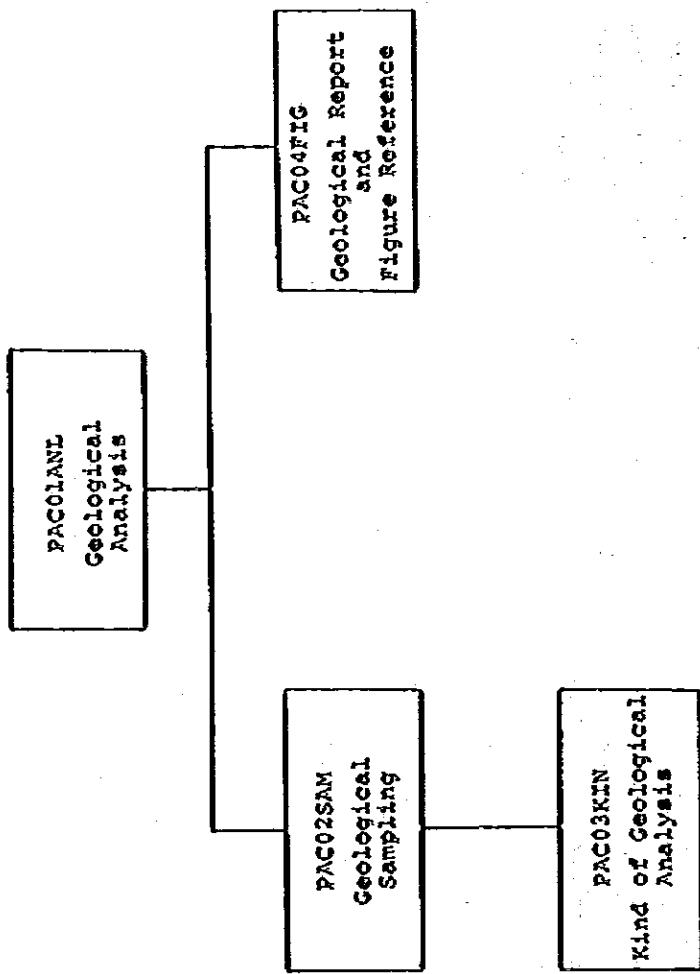
<u>Code</u>	<u>Name</u>	<u>Abbreviation</u>
1.0	Geological field survey	GFS
1.1	Regional mapping survey	RMS
1.2	Structural mapping survey	SMS
1.3	Stratigraphic mapping survey	STM
1.4	Reconnaissance sampling survey	RSS
1.5	Other geological survey	OGF
2.0	Photo-geological survey	PGF
2.1	Photo-geological survey	PHG
2.2	Side looking airborne radar survey	SLR
2.3	Other photo-geological survey	RSP
3.1	Other geological survey	OGS

## (2) FABCOMAP, "Geological Report and Map Reference"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1-	Group key Type of map, figure and report	GRP-S2000 MTR-MTY	1	9(1)	To be coded as in APPENDIX IV 1. Survey area map 2. Main map prepared by survey 3. Other map prepared by survey 4. Main figure prepared by survey 5. Other figure prepared by survey 6. Survey report 7. Other report To be coded as in APPENDIX IV
2	Map, figure and report code	MFR-CD	2	X(10)	

3-1 Segment Diagram of PACGLNL, "Geological Analysis"

3 PACGLNL, "Geological Analysis"



**3-2 Data Format of PACGLNL, "Geological Analysis"**

- (1) PAC01ANL, "Geological Analysis"**
- (2) PAC02SAM, "Geological Sampling"**
- (3) PAC03KIN, "Kind of Geological Analysis"**
- (4) PAC04FIG, "Geological Report and Figure Reference"**

## (1) PACOLAN, "Geological Analysis"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Analysis code Kind of analysis	[KEY] ANAL-CD ANAL-KD	1 X(2)		To be coded as in APPENDIX IV To be coded as in APPENDIX IV See NOTE 1 in page AIII-15
2	Sequence number	SEQ-NO	3 9(3)		To be coded as in APPENDIX IV
2	Area code	AREA-CD	6 9(2)*3		To be coded as in APPENDIX IV
3	PERTAMINA or contractor	CONTRACTOR-TG	12 9(1)		To be coded as in APPENDIX IV
4	Analysis subject	ANAL-SUBJ	13 9(1)*3		1. PERTAMINA 2. Foreign contractor
4				3. Well unit	To be coded as in APPENDIX IV
4				4. Formation unit	1. Area unit
4				5. Reservoir unit	2. Field unit
5	Report code	RREP-CD	16 X(10)		3. Well unit
6	Location of laboratory	LOCATION-LABORATORY	26 X(30)		4. Formation unit
7	Total analysis cost	ANAL-CT			5. Reservoir unit
1	Rp	RP-CT	56 9(10)		To be coded as in APPENDIX IV
2	USS	US-CT	66 9(8)V9(2)		[Rp] Rx. 9999999999 [USS] Rx. 99999999.99
8	Exchange rate of Rp to USS	EX-RATE	76 9(4)V9(2)		[Rp/USS]

**NOTE 1. Kind of Analysis**

<u>Code</u>	<u>Name</u>	<u>Abbreviation</u>
14	Geochemical analysis	GCM
20	Paleontological analysis	(PLA)
21	Foraminifera analysis	FRA
22	Pollen analysis	POL
23	Nanno-plankton analysis	NNP
24	Ostracoda analysis	OST
25	Other paleontological analysis	OPL
30	Lithological analysis	(LTA)
31	Carbonate rock analysis	CBR
32	Clastic rock analysis	CLR
33	Other lithological analysis	CLT
41	Other geological analysis	OGA

## (2) PROGSAM, "Geological Sampling"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Sample group No.	[KEY] SAMPLE-GRP-NO	1	9(2)	
2	Sample identification	SAMPLE-ID	3	X(10)	
3	Field code	FIELD-CD	13	X(3)*5	To be coded as in APPENDIX IV
4	Well code	WELL-CD	28	X(7)*10	To be coded as in APPENDIX IV
5	Formation code	FORMATION-CD	98	9(2)*5	To be coded as in APPENDIX IV
6	Kind of sample	SAMPLE-KD	108	9(1)*4	To be coded as in APPENDIX IV
			1..	Cutting sample	
			2..	Conventional sample	
			3..	Side wall core sample	
			4..	Surface rock sample	
				Ex. XXXX.MM.DD-XXXX.MM.DD	
7	Analysis period	ANAL-PO	112	X(8)X(8)	
8	Sampling locality	SAMPLE-LOCALITY	128	X(50)	In case of surface rock sample

## (3) PACOSKIN, "Kind of Geological Analysis"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Kind of analysis performed (XXX)	ANAL-PERF-KD	1	9(2)	To be coded as in APPENDIX IV See NOTE 1 in page AIII-18
2	Number of samples	NO-SAMPLES	3	9(3)	Given by financial department
3-	Cost	UNIT-CR	6	9(10)	[RP]
1		RP-CR	16	9(8)V9(2)	[USS]
2		US-CR			

**NOTE 1. Kind of Analysis Performed**

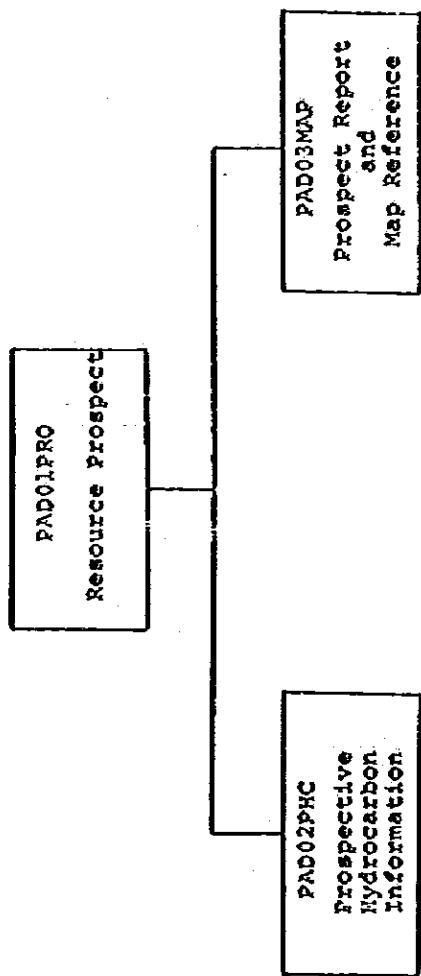
<u>Code</u>	<u>Name</u>
<b>(In case of Geochemical Analysis)</b>	
01	Organic carbon analysis
02	Extraction and fractionation analysis
03	Kerogen typing analysis
04	Gas chromatography analysis
05	Gas and gassolines analysis
06	Spore colouration analysis
07	Vitrinite reflectivity analysis
08	Thermal alteration index analysis
09	E.S.R. maximum paleontemperature analysis
10	Elemental analysis
11	Pyrolysis analysis
12	Other
<b>(In case of Lithological Analysis)</b>	
01	Microscopic analysis
02	Electron microscopic analysis
03	Chemical analysis
04	X-ray analysis
05	Heavy mineral analysis
06	Clay mineral analysis
07	Sieving analysis
08	Settling velocity method analysis
09	Other analysis

## (4) PACO4FIG, "Geological Report and Figure Reference"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1-	Group key Type of figure and report	GRP-SW000 FR-TR	1	9(1)	To be coded as in APPENDIX IV 1. Main chart 2. Figure 3. Report
2	Figure and report code	FR-CD	2	X(10)	To be coded as in APPENDIX IV

4-1 Segment Diagram of PADPROSP, "Resource Prospect"

4 PADPROSP, "Resource Prospect"



**4-2 Data Format of PADPROSP, "Resource Prospect"**

- (1) PAD01PRO, "Resource Prospect"**
- (2) PAD02PHC, "Prospective Hydrocarbon Information"**
- (3) PAD03MAP, "Prospect Report and Map Référence"**

## (1) PROGIPRO, "Resource Prospect"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Prospect code	(XXX)		X(3)	To be coded as in APPENDIX IV
2	Area code	AREA-CD	4	9(2)	To be coded as in APPENDIX IV
3	Prospect name	PROSPECT-NM	6	X(25)	
4	Well code	WELL-CD	31	X(7)*5	To be coded as in APPENDIX IV
5	Period	PROSPECT-PO	66	X(8)X(8)	Ex. XXXX.MM.DD-XXXX.MM.DD

## (2) PROSPECTIVE HYDROCARBON INFORMATION" (1/2)

Item No.	Item Name	Field Name	Posi <sup>n</sup>	Properties	Remarks
2	Formation code Type of trap	[KEY] FORMATION-CD TRAP-TY	1 9(2) 3 9(1)		No be coded as in APPENDIX IV No be coded as in APPENDIX IV 1. Structural trap (STC) 2. Stratigraphic trap (STR) 3. Combination trap (CMB) 4. Carbonate build up trap (REF) 5. Other trap (OTH)
3	Number of layers	NO-LAYERS	4 9(3)		
4	Size of areal closure	AREAL-CLOSURE-SZ	7 9(2)V9(3)	[10 <sup>3</sup> acre]	
5	Height of vertical closure	VERTICAL-CLOSURE-HI	12 9(4)	[ft]	
6-	Estimated net pay thickness	THICKNESS	16 9(4)	[ft]	
1	Gas	THICK-GAS	20 9(4)	[ft]	
2	Oil	THICK-OIL			
7-	Estimated reservoir rock volume	RESROCK-VOL	24 9(3)V9(3)	[10 <sup>3</sup> acre ft]	
1	Gas bearing zone	GAS-BEARING-ZN	30 9(3)V9(3)	[10 <sup>3</sup> acre ft]	
2	Oil bearing zone	OIL-BEARING-ZN			
8-	Index Productivity	INDEX-PRODUCT	36 9(4)V9(1)	[10 <sup>3</sup> ft <sup>3</sup> /acre ft]	
1	C.I.P.	IP-GAS	41 9(4)V9(1)	[10 <sup>6</sup> stb/acre ft]	
2	O.I.P.	IP-OIL			
9-	Initial hydrocarbons in place	INIT-HYD-PLACE	46 9(5)V9(2)	[10 <sup>7</sup> st. ft <sup>3</sup> ]	
1	Gas	IM-GAS	53 9(5)V9(2)	[10 <sup>6</sup> stb]	
2	Oil	IM-OIL	60 9(3)	[%]	
10-	Recoverable hydrocarbons in place	RECOV-HYD-PLACE			
1	Gas	RH-GAS	63 9(5)V9(2)	[10 <sup>9</sup> st. ft <sup>3</sup> ]	
2	Oil	RH-OIL	70 9(5)V9(2)	[10 <sup>6</sup> stb]	

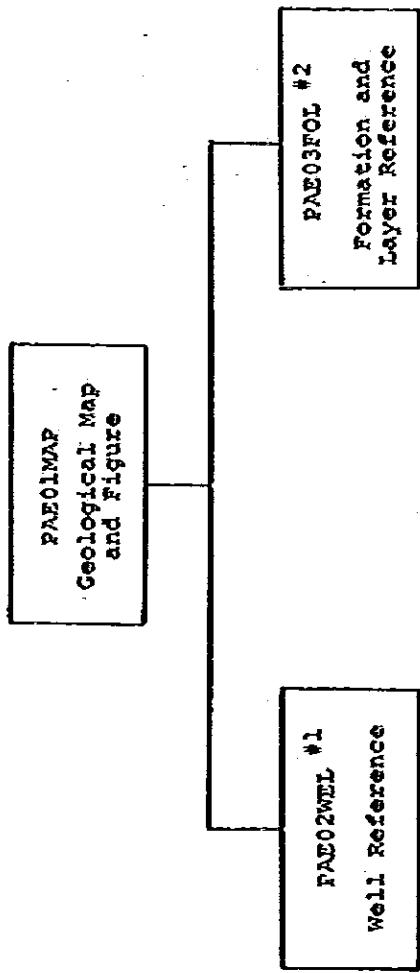
## (2) P&amp;D02PHC, "Prospective Hydrocarbon Information" (2/2)

Item No.	Item Name	Field Name	Position	Properties	Remarks
12	Chance Factor	CHANCE-FACT	77	9(3)	(a)
13-	Risk reduced recoverable hydrocarbons in place	RR-RECOV- HYD-PLACE			
1	Gas	RR-GAS	80	9(5)V9(2)	[109 stdb]
2	Oil	RR-OIL	87	9(5)V9(2)	[106 stdb]

## (3) PROJMAP, "Prospect Report and Map Reference"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1-1	Group key Type of map and report	GRP-SEQ00 MR-TY	1	9(1)	No be coded as in APPENDIX IV 1. Seismic interpretation report 2. Prospect and lead report 3. Map
2	Map and report code	MR-CD	2	X(10)	No be coded as in APPENDIX IV

S-1 Segment Diagram of PAEGLMAP, "Geological Map and Figure"



- #1: This segment is applied to all kind of map but for topographic map and contract area map.
- #2: This segment is applied to all kind of map but for topographic map, contract map and well location map.

**5-2 Data Format of PAEGLMAP, "Geological Map and Figure"**

- (1) PAE01MAP, "Geological Map and Figure"**
- (2) PAE02WEL, "Well Reference"**
- (3) PAE03FOL, "Formation and Layer Reference"**

## (1) PNEOMAP, "Geological Map and Figure" (1/2)

Item No.	Item Name	Field Name	Position	Properties	Remarks
1-	Map code	[XXX]			To be coded as in APPENDIX IV
1	Group name	MAP-CD	1	X(1)	
2	Kind of map	GROUP-NM	2	X(2)	To be coded as in APPENDIX IV
2	Reference number	MAP-KD			See NOTE 1 in page AIII-30
3	Province code	REF-NO	4	X(7)	To be coded as in APPENDIX IV
3	Area code	PROVINCE-CD	11	9(1)*3	To be coded as in APPENDIX IV
4	Field code	AREA-CD	14	9(2)*3	To be coded as in APPENDIX IV
5	Prepared or revised date	FIELD-CD	20	X(3)*3	To be coded as in APPENDIX IV
		PREP-REVISED-DT	29	X(8)	Ex. XXXX.NM.DD.
6-	Map identification	MAP-ID	37	X(100)	
1	Title	MAP-TL			
2	Identification	MAP-IDNO	137	X(11)	Number currently used in PERTAMINA
7	Author	MAP-AUTHOR	148	X(30)	
8	Company name	MAP-COMPANY-NM	178	X(50)	
9	Drawing number	MAP-DRAW-NO	228	X(7)	Number currently used in PERTAMINA
10	Micro-film number	MAP-MCT-NO	235	X(20)	
11	Map sheet size	MAP-SHEET-SZ	270	X(12)	
12	Storage number	MAP-STORAGE-NO	272	X(10)	
13	Report code	MAP-REP-CD	262	X(10)	To be coded as in APPENDIX IV
	Followings are in case of map				
14	Scale	MAP-SC	292	9(10)	Ex. 10000000 (1:10,000,000)
15	Contour interval	MAP-CONTOUR-IV	302	X(10)	Ex.100 ft. 10 m etc.
16-	Coordinance of map limit	MAP-LIMIT-CORD			
1	Latitude (S)	LATITUDE	312	S9(6)*2	Ex. 999.99.99
2	Longitude (E)	LONGITUDE	324	S9(7)*2	Ex. 999.99.99

## (1) PROGIMAP, "Geological Map and Figure" (2/2)

Item No.	Item Name	Field Name	Position	Properties	Remarks
Followings in case of cross-section					
17	Line name	LINE-NM	292	X(20)	
18-	Scale	CROSS-SC	312	9(10)	
1	Horizontal scale	CROS-HORI-SC	322	9(10)	Ex. 1000000000 (1:1000000000)
2	Vertical scale	CROS-VERT-SC	332	9(3)	Ex. 100000 (1:10000)
19	Number of well	NO-WELLS			
20	Filler	FILLER	335	X(3)	
Followings are in case of chart					
21-	Scale	CHART-SC	292	9(10)	
1	Horizontal scale	CHART-HORI-SC	302	9(10)	Ex. 1000000000 (1:1000000000)
2	Vertical scale	CHART-VERT-SC	312	9(3)	Ex. 100000 (1:10000)
22	Number of wells	NO-WELLS			
23	Filler	FILLER	315	X(23)	

NOTE 1. Kind of Map and Figure

<u>Code</u>	<u>Name</u>
10	General map
11	Topographic map
12	Contract area map
13	Well location map
14	Prospect and lead map
15	Field location map
16	Exploration activity map
17	Other general map
20	Geological information map
21	Field geological map
22	Tectonic map
23	Facies map
24	Geothermal map
25	Geochemical map
26	Other geological information map

<u>Code</u>	<u>Name</u>
30	Geological contour map
31	Structural contour map
32	Isopach (Iso-Lith) map
33	Other geological contour map
40	Reservoir information map
41	Production map
42	Isoporosity map
43	Isopermeability map
44	Net oil isopach map
45	Net gas isopach map
46	Other reservoir information map
50	Cross-section
51	Structural cross-section
52	Stratigraphic cross-section
53	Other cross-section
60	Chart
61	Geological correlation chart
62	Paleontological distribution chart
63	Other chart
70	Other map and figure

## (2) PNEOWELL, "Well Reference"

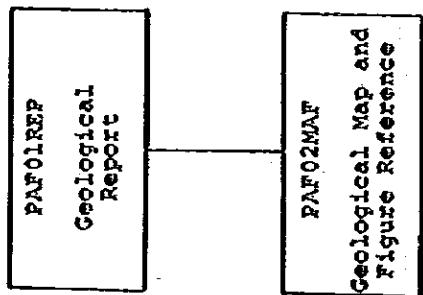
Item No.	Item Name	Field Name	Post- tion	Properties	Remarks
1	Well code Objective of well	[KEY] WELL-QD WELL-QB	1 8	X(7) 9(1)	To be coded as in APPENDIX IV To be coded as in APPENDIX IV 1. Wild cat 2. Delimitation and/or appraisal 3. Producer 4. Injector 5. Observatory
2					

## (3) PN03FOL, "Formation and Layer Reference"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1-	Group key	GRP-SEQ00			
2-	Formation code	FORMATION-CD	1	9(2)	to be coded as in APPENDIX IV
1-	Layer	LAYER			
2-	Field code	FIELD-CD	3	X(3)	to be coded as in APPENDIX IV
1-	Layer code	LAYER-CD	6	X(3)	to be coded as in APPENDIX IV
2-					

6-1 Segment Diagram of PAFGLREP, "Geological Report"

6 PAFGLREP, "Geological Report"



**6-2 Data Format of PAFGLREP, "Geological Report"**

- (1) PAF01REP, "Geological Report"**
- (2) PAF02MAP, "Geological Map and Figure Reference"**

## (1) PARMREP, "Geological Report"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Report code	[KEY] REPORT-CD	1	X(1)	To be coded as in APPENDIX IV
	Group name	GROUP-NM	2	X(2)	To be coded as in APPENDIX IV
2	kind of report	REP-KD			See NOTE 1 in page AIII-37
3	Reference number	REF-NO	4	X(7)	To be coded as in APPENDIX IV
	Area code	AREA-CD	11	9(2)*3	To be coded as in APPENDIX IV
2	Field code	FIELD-CD	17	X(3)*5	Ex.YYY.YY.MM.DD
3	Prepared date	PREP-DT	32	X(8)	
4	Identification of report	REP-ID			
5	Title	REP-TL	40	X(100)	
1	Identification number	REP-IDNO	140	X(20)	Currently used in PERTAMINA
2	Author	REP-AUTHOR	160	X(30)	
6	Company name	REP-COMPANY-NM	190	X(50)	
7	Storage number	REP-STORAGE-NO	240	X(10)	Currently used in PERTAMINA
8					

**NOTE 1. Kind of Report**

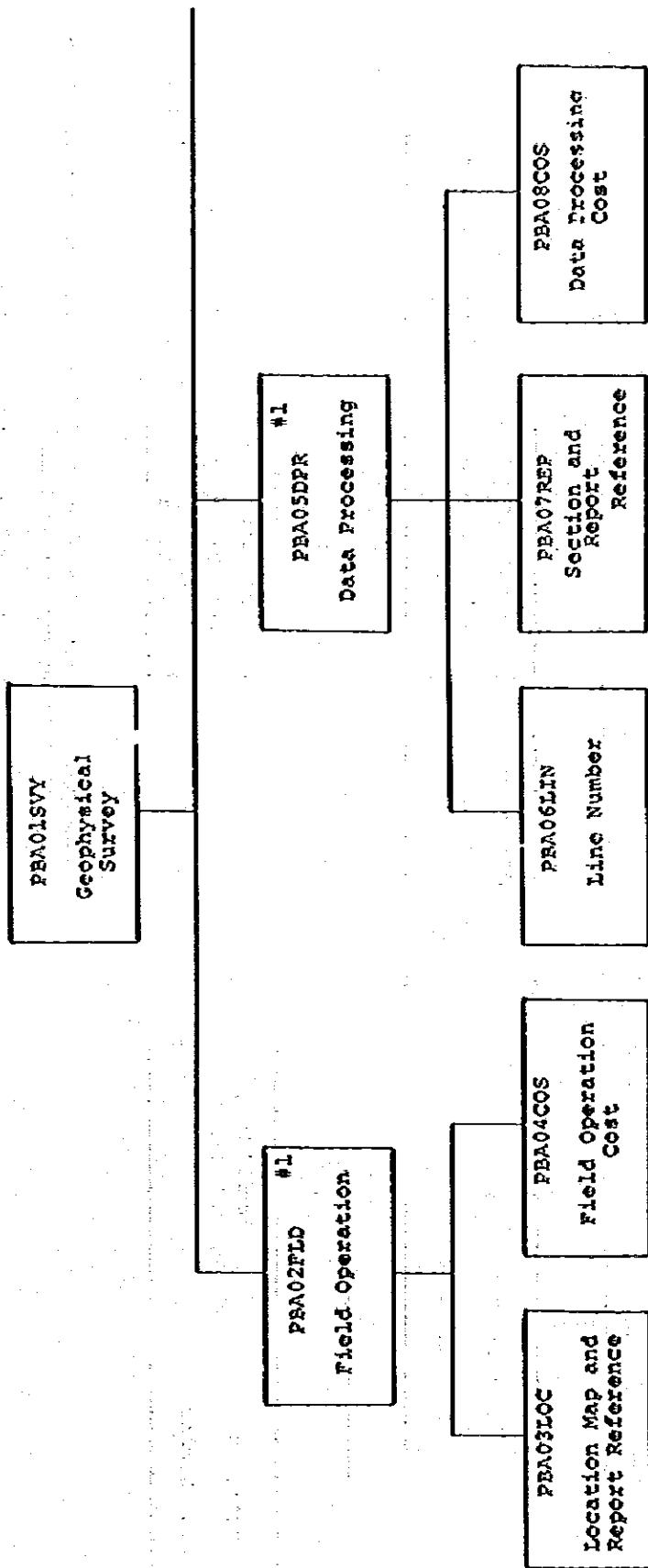
<u>Code</u>	<u>Name</u>
01	Monthly exploration report
02	Annual exploration report
03	Well resume report
04	Drilling proposal report
05	Drilling operation program report
06	Paleontological report
07	Field mapping report
08	Photogeological report
09	Prospect and lead report
10	Geochemical analysis report
11	Lithological analysis report
12	Geological analysis report
13	Log evaluation report
14	Geological evaluation report
15	Basin study and regional study report
16	Special study report
17	Work program and budget report
18	Other geological report

## (2) PAFOZMAP, "Geological Map and Figure Reference"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Map code [KEY]	MAP-CD	1 X(10)		to be coded as in APPENDIX IV

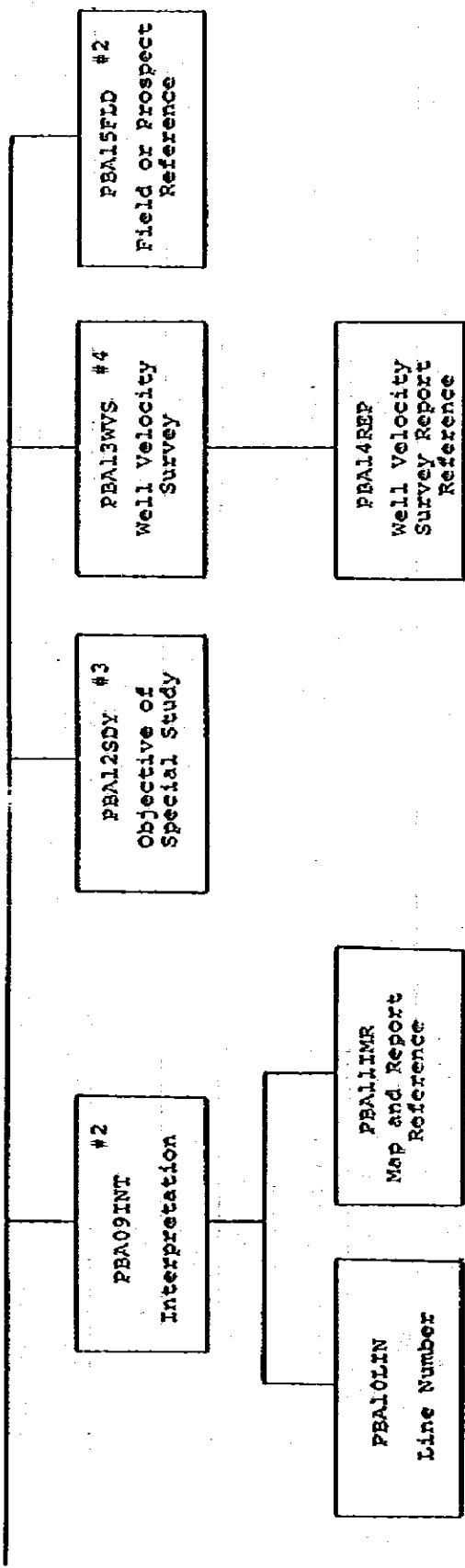
7-1 Segment Diagram of PBAGPSVY, "Geophysical Survey" (1/2)

7 PBAGPSVY, "Geophysical Survey"



#1: This segment is applied to seismic survey, magnetic survey and gravity survey.

Segment Diagram of PBAGPSV, "Geophysical Survey" (2/2)



#2: This segment is applied to seismic survey, magnetic survey,  
gravity survey and special study.

#3: This segment is applied to special study.

#4: This segment is applied to well velocity.

## 7-2 Data Format of PBAGPSVY, "Geophysical Survey"

- (1) PBA01SVY, "Geophysical Survey"
- (2) PBA02FLD, "Field Operation"
- (3) PBA03LOC, "Location Map and Report Reference"
- (4) PBA04COS, "Field Operation Cost"
- (5) PBA05DPR, "Data Processing"
- (6) PBA06LIN, "Line Number"
- (7) PBA07REP, "Section and Report Reference"
- (8) PBA08COS, "Data Processing Cost"
- (9) PBA09INT, "Interpretation"
- (10) PBA10LIN, "Line Number"
- (11) PBA11IMR, "Map and Report Reference"
- (12) PBA12SDY, "Objective of Special Study"
- (13) PBA13WVS, "Well Velocity Survey"
- (14) PBA14REP, "Well Velocity Survey Report Reference"
- (15) PBA15FLD, "Field or Prospect Reference"

## (1) PROJSTV, "Geophysical Survey"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1-	Survey code Kind of geophysical survey and study	[KEY] SURVEY-CD SURVEY-STUDY- KC	1 9(1)		To be coded as in APPENDIX IV To be coded as in APPENDIX IV 1. Seismic survey reflection method (SMR) 2. Seismic survey refraction method (SMR) 3. Magnetic survey (MGN) 4. Gravity survey (GRV) 5. Well velocity survey (WVS) 6. Special study (SPS)
2	Sequence number	SEQ-NO	2 9(3)		
2	Main area code	MAIN-AREA-CD	5 9(2)		To be coded as in APPENDIX IV
3	Area code	AREA-CD	7 9(2)*3		To be coded as in APPENDIX IV
4	Well code	WELL-CD	13 X(7)		To be coded as in APPENDIX IV
5	Period for survey	SURVEY-PD	20 X(8)X(8)		Ex. YYYY.MM.DD - YYYY.MM.DD
6	Survey name	SURVEY-NM	36 X(10)		

## (2) PBA02FLD, "Field Operation" (1/5)

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Period for field operation	FLDOPERAT-PD	1 X(8)X(8)	Ex. YYYY.MM.DD - YYYY.MM.DD	
2-	Contract	CONTRACT	17 X(8)	Ex. YYYY.MM.DD	
2	Date	CONTRACT-DT	25 X(20)	To be coded as in APPENDIX IV	
3	Contract number	CONTRACT-NO	45 X(3)	Conducted company	
4	Operator code	OPRAT-CD	45 X(3)	To be coded as in APPENDIX IV	
4	Company code	COMPANY-CD	48 X(2)	Geophysical contractor's name	
5-	Magnetic tape	MAGNE-TAPE	50 X(50)	of start & end	
1	Tape number & supporting data	TAPE-NO	100 X(20)		
2	Type of magnetic tape	TAPE-TY	120 9(3)*3	[%] good, fair, poor	
3	Quality	TAPE-QUAL	129 X(50)		
4	Storage place	STORAGE-PLACE	179 9(2)	To be coded as in APPENDIX IV	
6	Site description	SITE-DES	181 9(7)V9(3)	See NOTE 1 in page AIII-48	
7	Total length recorded	RECORDED-IN	191 9(8)	[km]	
8	Total stations recorded	RECORDED-STATION	191 9(8)	In case of seismic survey total number of shot points will be input	
9	Total line cutting	LINE-CUTTING	199 9(7)V9(3)		
10	Total bridging	BRIDGING	209 9(5)V9(3)	[km]	
11	Total land survey	SURVEY-LAND	217 9(7)V9(3)	[km]	
12-	Helicopter	HELICOPTER	227 9(4)V9(2)	[hours]	
1	Total flying hours	FLY-HOURS	227 9(2)		
2	No. of helipad	NO-HELIP	233 9(2)		
3	Name of helibase station	HELIBASE-NM	235 X(30)		
4	Type of helicopter	HELICOPTER-TY	265 X(20)		

## (2) PBA02TLD, "Field Operation" (2/5)

Item No.	Item Name	Field Name	Position	Properties	Remarks
13-	Total fuel	TOTAL-FUEL			
1	Gasoline	GASOLINE	285	9(7)V9(1)	[2]
2	Diesel oil	DIESEL-OIL	293	9(7)V9(1)	[2]
3	Kerosene	KEROSENE	301	9(7)V9(1)	[2]
4	Aviation turbine fuel	AV-TURBINE-FUEL	309	9(7)V9(1)	[2]
5	Lubricant	LUBRICANT	317	9(7)V9(1)	[2]
6	Cease	GREASE	325	9(7)V9(1)	[kg]
14-	Average manpower	AV-MANPOWER			
1	Expatriate	EXPATRIATE	333	9(2)	
2	Local staff	LOCAL-STAFF	335	9(1)	
3	Labor	LABOR	336	9(4)	
15-	Total explosive	EXPLOSIVE			
1	Primer	PRIMER	340	9(7)	[lbs]
2	Detonator	DETONATOR	347	9(7)	[pcs]
3	Main charge	MAIN-CHARGE	354	9(7)	[lbs]
16-	Drilling	DRILLING			(for the explosive)
1	Total holes drilled	TOTAL-HOLES	361	9(7)	
2	Total depth drilled	TOTAL-DF	368	9(9)	[m]
17-	Survey method of common Land/shipboard air	SURVEY-METH. LSA-RG.	377	9(1)	To be coded as in APPENDIX IV See NOTE 2 in page AIII-49
1	Line interval	LINE-IV	378	X(15)	1. Land
2	Recording system	REC-SYS	393	9(1)	2. Ship
3					3. Air
					Ex. 2 x 4 km
					To be coded as in APPENDIX IV
					A. Digital
					B. Analogue

## (2) "PBA02FLD, "Field Operation" (3/5)

Item No.	Item Name	Field Name	Properties	Remarks
17-4	Name of recording instrument	REC-INSTR-NM	X(50)	
5	Distance between stations	DIST-STATION	9(S)	[m]
				In case of seismic survey, distance between shot points will be input.
6	Positioning method	POSI-METH	X(40)	
18-	In case of seismic survey			
1	Recording filter	REC-FILTER	X(15)	Ex. 12 - 128 Hz [msec]
2	Sampling rate	SAMPLING-RATE	9(2)	Geophone type or name of streamer and frequency
3	Name of detector	DETECTOR-NM	X(50)	[m]
4	Length	SURVEY-LN	9(5)	Between centers of first group and last group, or length of streamer
5	Offset	OFFSET	9(4)	[m]
6	Group interval	GROUP-IV	9(4)	[m]
7	Geophone interval	GEOPHONE-IV	9(3)	[m]
8	No. of groups	NO-GROUPS	9(3)	
9	No. of geophone per group	NO-GDGRO	9(3)	
10	Source of energy	ENERGY-SOU	X(40)	
11	No. of holes per shot	NO-HOLPSHOT	9(2)	
12	Charge per hole	CHARGE-PHOLE	X(15)	Ex. 10 & 15 lbs
13	Hole's separation	HOLE-SEP	9(2)	[m]
14	Average charge depth	CHARGE-DP	637	[m]

## (2) PANO2FLD, "Field Operation" (4/5)

Item No.	Item Name	Field Name	Position	Properties	Remarks
18-15	Spread pattern	SPREAD-PAT	639	9(2)	No be coded as in APPENDIX IV
				1. Split spread 2. End-off spread 3. Double split spread 4. Double end-off spread 5. Slalom line spread 6. T spread 7. L spread 8. Offset spread 9. Other spread	[%]
16	No. of fold for recording	NO-FOLD-REC	641	9(4)*2	
17	Field test date	FLD-TEST-DT	649	X(8)X(8)	XX.YYYY.MM.DD - YYYY.MM.DD (for parameter test)
18	Field test location	FLD-TEST-LOC	665	X(40)	
19	Filler	Filler	705	X(83)	
19-	In case of magnetic survey Approximate surveyed area size	MAGNE-SURVEY SURVEY-AREA-SZ	489	9(6)V9(3)	[Xm <sup>2</sup> ]
1	Flight high	FLIGHT-HI	498	9(5)	[m]
2	Sample rate	SAMPLE-RATE	503	X(15)	
3	Magnetometer	MAGNETOMETER		*2	Meaning of index
4-					1. Normal 2. For diurnal correction
1	Name	MAGNE-NM	518	X(50)	
2	Accuracy	MAGNE-ACCUR	568	X(50)	
5	Filler	Filler	718	X(70)	

## (2) PBA02FLD, "Field Operation" (5/5).

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	In case of gravity survey Approximate surveyed area size	GRAV-SURVEY SURVEY-AREA-SZ	489	9(6)V9(3)	[Xm <sup>2</sup> ]
2	Name of gravimeter	GRAV-NM	498	X(50)	Reading scale and temperature
3	Accuracy of gravimeter	GRAV-ACCUR	548	X(50)	for analysis of rock density
4	No. of samples	NO-SAMPLES	598	X(40)	for analysis of rock density
5	Description	DESCRIPT	638	X(150)	for analysis of rock density

NOTE 1. Site Description

<u>Code</u>	<u>Name</u>
1	Tidal area
2	Swamp
3	Jungle
4	Open area with forest
5	Open area with natural grass
6	Desert
7	Hill with jungle
8	Hill with forest
9	Hill with natural grass
10	Mountain (gentle)
11	Mountain (steep)
12	Glacial area
13	Offshore

NOTE 2.

Survey method	"Standard"	"Sharp"	"A.T."	Actual	Not actual
Sediment survey	X	O	O	O	X
Magnetic survey	O	O	O	X	O
Gravimetric survey	O	O	O	X	O

## (3) PBA03LOC, "Location Map and Report Reference"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1-	Group key Type of map, section and report	GRP-SEQ00 MSR-TY	1	9(1)	To be coded as in APPENDIX IV 1. Map 2. Section 3. Report
2	Map and report code	MR-CD	2	X(10)	To be coded as in APPENDIX IV

## (4) PBA04COS, "Field Operation Cost"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Date	[KEY]	1	X(4)	Ex. XXXX
2	Length recorded per year	DT	5	9(6)V9(3)	[KM]
3	No. of stations per year	SURVEY-LN	14	9(7)	
4-	Operation cost per year	NO-STATIONS			
1	RP	OP-RP-CT	21	9(10)V9(2)	[RP]
2	USS	OP-RP-CT	33	9(7)V9(2)	[USS]
5-	Manpower cost for expatriate per year	MANPOW-CT-EXP			
1	RP	MPE-RP-CT	42	9(10)V9(2)	[RP]
2	USS	MPE-US-CT	54	9(7)V9(2)	[USS]
6-	Manpower cost for local staff per year	MANPOW-CT- LOCST			
1	RP	MPS-RP-CT	63	9(10)V9(2)	[RP]
2	USS	MPS-US-CT	75	9(7)V9(2)	[USS]
7-	Manpower cost for labor per year	MANPOW-CT-LAB			
1	RP	MPL-RP-CT	84	9(10)V9(2)	[RP]
2	USS	MPL-US-CT	96	9(7)V9(2)	[USS]
8	Exchange rate	EX-RATE	105	9(4)V9(2)	[RP/USS]

## (5) PDA05DPR, "Data Processing" (1/2)

Item No.	Item Name	Field Name	Properties	Remarks
1	No. of times Period	[XEX]	1 9(1) 2 X(8)X(8)	for data processing Ex. YYYY.MM.DD ~ YYYY.MM.DD
2	Order document	NO-TIMES PROC-PD	1 9(1) 2 X(8)X(8)	for data processing
3- 4	Date	ORD-DOCUM	X(8)	
2	Identification	ORD-DT	X(8)	
4	Operator code	ORD-ID	X(20)	
		OPRAT-CD	X(3)	
5	Company code	COMPANY-CD	X(2)	
6-	Magnetic tape	MAGNE-TAPE		
1	Tape number & supporting data	TAPE-NO	X(50)	of start and end
2	Type of magnetic tape	TAPE-TY	X(20)	
3	Quality	TAPE-QUAL	9(3)*3	[%] good, fair, poor
4	Storage place	STORAGE-PLACE	X(50)	
	(Processing method)	PROC-METH		
7-	(In case of seismic survey:)			
1	No. of fold for recording	NO-FOLD-REC	9(4)*2	[8]
2	No. of fold for processing	NO-FOLD-PROC	9(4)*2	[4]
3	Sampling rate for processing	SAMPL-RATE	9(2)	[msec]
4	Kind of section	SECT-KD	9(1)*4	to be coded as in APPENDIX IV
				1. Unmigrated time section
				2. Unmigrated depth section
				3. Migrated time section
				4. Migrated depth section

## (15) PROCESSOR "Data Processing" (2/2)

Item No.	Item Name	Field Name	Position	Properties	Remarks
7-5	Application of deconvolution	APPLIC-DEC	202	9(1)	To be coded as in APPENDIX IV 1. Done before stack (DBS) 2. Done after stack (DAS) 3. DAS & DAS 4. Without
6	Additional processing sequence	ADD-PROC-SEG-FILLER	203	X(50)	
7	Filler		253	X(67)	
	(In case of magnetic survey:)				
7-1	Sampling rate for processing	SAMPLING-RATE	180	X(15)	Ex. YYYY
2	I.G.R.F. used for correction	CORR-DT	195	9(4)	I.G.R.F. means International Geomagnetic Reference Field.
3	Filtration	FILTRATION-MS	199	X(100)	
4	Filler	FILLER	299	X(21)	
	(In case of gravity survey:)				
7-1	Rock density	ROCK-DENS	180	9(3)V9(4)*5	[g/cm <sup>3</sup> ] applied to processing
2	Filtration	FILTRATION-GS	215	X(100)	

## (6) PBAOGLIN, "Line Number"

Item No.	Item Name	Field Name	Properties	Remarks
			Position	
1	Identification of line No. (KEY)	ID-LINO	1 9(2)	
2	Line number and station number	LINO-STNO	3 X(100)	In case of seismic survey, shot point number will be input (for start and end).

## (7) PBAOTREP, "Section-end Report Reference"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Group Key Type of map, section and report	GRP-SEQ00 MSR-TX	1	9(1)	To be coded as in APPENDIX IV 1. Map 2. Section 3. Report
	2 Map and report code	MR-CD	2	X(10)	To be coded as in APPENDIX IV

## (8) PAN08COS, "Data Processing Cost"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Date [KEY]	DT	1	X(4)	Ex. YYYY
2	Processed length per year	PROC-LN	5	9(6)V9(3)	[Km]
3	No. of stations processed per year	NO-STATIONS	14	9(7)	
4-	Processing cost per year	PROC-CT	21	9(10)V9(2)	[RP]
1	RP	RP-CT	33	9(7)V9(2)	[USS]
2	USS	US-CT	42	9(4)V9(2)	[RP/USS]
3	Exchange rate	EX-RATE			

## (9) PBA001, "Interpretation"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	No. of times	[KEY]	1	9(1)	for interpretation
2	Period	INT-PD	2	X(8)X(8)	Ex. YYYY.MM.DD - YYYY.MM.DD for interpretation
3-	Order document	ORD-DOCUM	18	X(8)	
1	Date	ORD-DT	26	X(20)	Ex. YYYY.MM.DD
2	Identification	ORD-ID	46	X(13)	To be coded as in APPENDIX IV
4	Operator code	OPRAT-CD			Conducted company
5	Author	AUTHOR	49	X(30)	
6	Company code	COMPANY-CD	79	X(2)*2	To be coded as in APPENDIX IV
7	Total length interpreted	INT-LN	83	9(7)V9(3)	[Km]
8	Total stations Interpreted	INT-STATION	93	9(8)	
9	No. of times for processing	NO-TIMES-PROC	101	9(1)	
10-	Total interpretation cost	INT-CT			
1	RP	RP-CT	102	9(9)V9(2)	[RP]
2	USS	US-CT	113	9(6)V9(2)	[USS]
3	Exchange rate	EX-RATE	121	9(4)V9(2)	[RP/USS]

## (10) PBAIOLIN, "Line Number"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Identification of line no. [KEY] Survey code	ID-LINO SURVEY-CD	1 3	9(2) X(4)	To be coded as in APPENDIX IV In case of special study data used for the special study
2					
3	Line number and station number	LINO-STNO	7	X(100)	

## (11) "PBAIEMR," "Map and Report" Reference

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Group key Type of map, section and report	GSP-SEQ00 MSR-MY	1	9(1)	To be coded as in APPENDIX IV 1. Map 2. Section 3. Report
2	Map and report code	MR-CD	2	X(10)	To be coded as in APPENDIX IV

## (12) PBA12SDY, "Objective of Special Study"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Objective for special study	SPSTUD-OB	1	X(100) X(100)	In case of special study

## (13) PWLWWS, "Well Velocity Survey"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1-1	Contract	CONTRACT	1	X(8)	Ex. YYYY.MM.DD
1-2	Date	CONT-DT	9	X(20)	
2-1	Contract number	CONT-N0	29	X(3)	To be coded as in APPENDIX IV
2-2	Operator code	OPRAT-CD			Conducted company
3-1	Company code	COMPANY-CD	32	X(2)	To be coded as in APPENDIX IV
3-2	Subcontractor's name				Subcontractor's name
4-1	Well location	WELL-LOC	34	X(25)*2	Line number & SP number
5-	Magnetic tape	MAGNE-TAPE			
5-1	Tape number & supporting date	TAPE-NO.	84	X(50)	
5-2	Type of magnetic tape	TAPE-TY	134	X(20)	
5-3	Quality	TAPE-QUAL	154	9(3)*3	[%] good, fair, poor
5-4	Storage place	STORAGE-PLACE	163	X(50)	
6	Datum level	DATUM-LV	213	X(20)	
7	Source or energy	SOURCE-ENERGY	233	X(40)	
8	Total shots	TOTAL-SHOTS	273	9(3)	
9	Initial depth surveyed	INT-SURVEY- DP	276	9(3)	[m]
10	Total depth surveyed	SURVEYED-DP	279	9(5)	
11	Formation code	FORMATION-CD	284	9(2)	To be coded as in APPENDIX IV of total depth surveyed
12	Synthetic seismogram	SYNTH-SEISM	286	9(1)	To be coded as in APPENDIX IV
13-	Total survey cost	SURVEY-CT			
13-1	RP	RP-CT	287	9(10)V9(2)	[RP]
13-2	USS	US-CT	299	9(7)V9(2)	[USS]
13-3	Exchange rate	EX-RATE	308	9(4)V9(2)	[RP/USS]

## (14) PBA14REP, "Well Velocity Survey Report Reference"

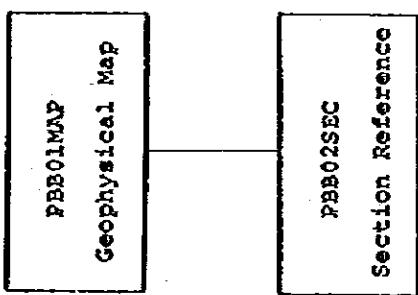
Item No.	Item Name	Field Name	Position	Properties	Remarks
1-	Group key Type of map, section and report	GRP-SEQ00 MSR-TY	1	9(1)	To be coded as in APPENDIX IV 1. Map 2. Section 3. Report
2	Map and report code	MR-CO	2	X(10)	To be coded as in APPENDIX IV

## (15) PBALSFLD, "Field or Prospect Reference"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Field code [KEY]	FIELD-CD	1	X(3)	To be coded as in APPENDIX IV

8. PBBGPMAP, "Geophysical Map"

8-1 Segment Diagram of PBBGPMAP, "Geophysical Map"



AIIIL-64

**8-2 Data Format of PBBGPMAP, "Geophysical Map"**

- (1) PBB01MAP, "Geophysical Map"**
- (2) PBB02SEC, "Section Reference"**

## (1) POSSOLMAP; "Geophysical Map" (1/2)

Item No.	Item Name	Field Name	Position	Properties	Remarks
1-	Map code	[X(XY)]			To be coded as in APPENDIX IV
2	Group name	MAP-CD	1	X(1)	
	Kind of map	GROUP-NM	2	X(2)	To be coded as in APPENDIX IV
3	Reference number	MAP-ID			See NOTE 1 in page AIII-68
4	Field code	REF-NO	4	X(7)	To be coded as in APPENDIX IV
5	Title	FIELD-CD	11	X(3) *3	To be coded as in APPENDIX IV
6	Date	MAP-TL	20	X(100)	
7	Identification	MAP-DT	120	X(8)	Ex. YYYY.MM.DD
8	Drawing number	MAP-IDNO	128	X(11)	
9	Storage number	MAP-DRAW-NO	139	X(7)	
10	Scale	MAP-STORAGE-NO	146	X(10)	
11	Micro-film number	MAP-SC	156	9(7)	Ex. 1000000 (1:1000000)
12	Contour interval	MAP-MCT-NO	163	X(20)	
13	Author	MAP-CONTOUR-IV	183	X(15)	Include unit
14-	Company code	MAP-AUTHOR	198	X(30)	To be coded as in APPENDIX IV
1	Report code	MAP-COMPANY-CD	228	X(2)	to which author belongs
2	Survey information	MAP-REP-CD	230	X(10)	To be coded as in APPENDIX IV
3	Survey code	SURVEY-INF			to which map is attached
4	Kind of survey procedure	SURVEY-CD	240	X(4)	
5	No. of times	SURVEY-PROC-KD	244	9(1)	
		NO-TIMES	245	9(1)	
					In case of data processing and interpretation
					1. Field operation 2. Data processing 3. Interpretation

## (1) PSEUDOMAP, "Geophysical Map" (2/2)

Item No.	Item Name	Field Name	Position	Properties	Remarks
15	In case of interpretation map (Seismic Survey, special study) Migrated or unmigrated	MIG-FC	246	9(1)	To be coded as in APPENDIX IV 1. Unmigrated. 2. Migrated.
16- 1	Horizon name Horizon code	HORI-NM HORI-CD	247	9(2)*2	To be coded as in APPENDIX IV 01. H-Lr. Brown 02. H-2, L. Green 03. H-3, Orange 04. H-4, Green 05. H-5, Blue 06. H-6, Yellow 07. H-7, L. Brown 08. H-8, Red/violet
2-	Formation Geological identification marker	FORMATION GEOL-ID-MARK	251	9(2)	*4 To be coded as in APPENDIX IV 01: Top of 02: Near top of 03: Upper 04: Middle of 05: Within 06: Base of 07: Lower 08: Correlated with 09: Approximately To be coded as in APPENDIX IV
	2 Formation code	FORMATION-CD	253	9(2)	

**NOTE 1. Kind of Map**

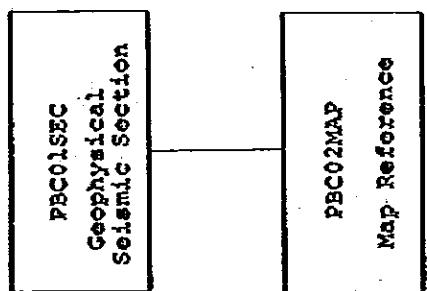
<u>Code</u>	<u>Name</u>
10	Seismic map
11	Shot point map
12	Time contour map
13	Interval contour map
14	Depth contour map
15	Isopach map
16	Seismic Section
17	Other map
20	Magnetic map
21	Location map
22	Residual field intensity map
23	Interpretation map
24	Other map
30	Gravity map
31	Location map
32	Bouguer anomaly map
33	Residual gravity map
34	Other map
40	Special study map

## (2) PBB02SEC, "Section Reference"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Map code [KEY]	MAP-CD	1	X(10)	to be coded as in APPENDIX IV Section code

9 PBCGPSEC, "Geophysical Seismic Section"

9-1 Segment Diagram of PBCGPSEC, "Geophysical Seismic Section"



**9-2 Data Format of PBCGPSEC, "Geophysical Seismic Section"**

- (1) PBC01SEC, "Geophysical Seismic Section"**
- (2) PBC02MAP, "Map Reference"**

## (I) PROCOSEC, "Geophysical Seismic Section"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1-	Map code	[KEY] MAP-CD			To be coded as in APPENDIX IV Section code
2	Group name	GROUP-NM	1	X(1)	
2	Kind of map	MAP-KD	2	X(2)	To be coded as in APPENDIX IV
3	Reference number	REF-NO	4	X(7)	See NOTE 1 in Page AIII-73
2	Field code	FIELD-CD	11	X(3)*3	To be coded as in APPENDIX IV
3	Section number	SEC-NO	20	X(18)	
4	No. of fold for processing	NO-FOLD-PROC	38	9(4)	
5-	Scale	SEC-SC			
1	Horizontal scale	SEC-HORI-SC	42	X(19)	
2	Vertical scale	SEC-VERT-SC	52	X(10)	
6	Spatial coherence enhancement	ENHANCEMENT	62	X(10)	
7	Compression	COMPRESSION	72	9(1)	To be coded as in APPENDIX IV
8	Micro-film number	SEC-MCF-NO	73	X(20)	
9	Kind of section	SEC-KD	93	9(1)	To be coded as in APPENDIX IV
10-	Survey information	SURVEY-INF			
1	Survey code	SURVEY-CD	94	X(4)	To be coded as in APPENDIX IV
2	No. of times	NO-TIMES	98	9(1)	

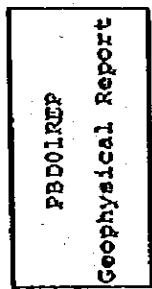
**NOTE 1. Kind of Map**

<u>Code</u>	<u>Name</u>
10	Seismic map
11	Shot point map
12	Time contour map
13	Interval contour map
14	Depth contour map
15	Isopach map
16	Seismic section
17	Other map
20	Magnetic map
21	Location map
22	Residual field intensity map
23	Interpretation map
24	Other map
30	Gravity map
31	Location map
32	Bouguer anomaly map
33	Residual gravity map
34	Other map
40	Special study map

## (2) PDC02MAP, "Map Reference"

Item No.	Item Name	Field Name	Properties	Remarks
	Map code	[KEY]	MAP-CD	
1			1 X(10)	To be coded as in APPENDIX IV

10-1 Segment Diagram of PBDGPREP, "Geophysical Report"



## 10 PBDGPREP, "Geophysical Report"

**10-2 Data Format of PBDGPREP, "Geophysical Report"**

**(1) PBD01REP, "Geophysical Report"**

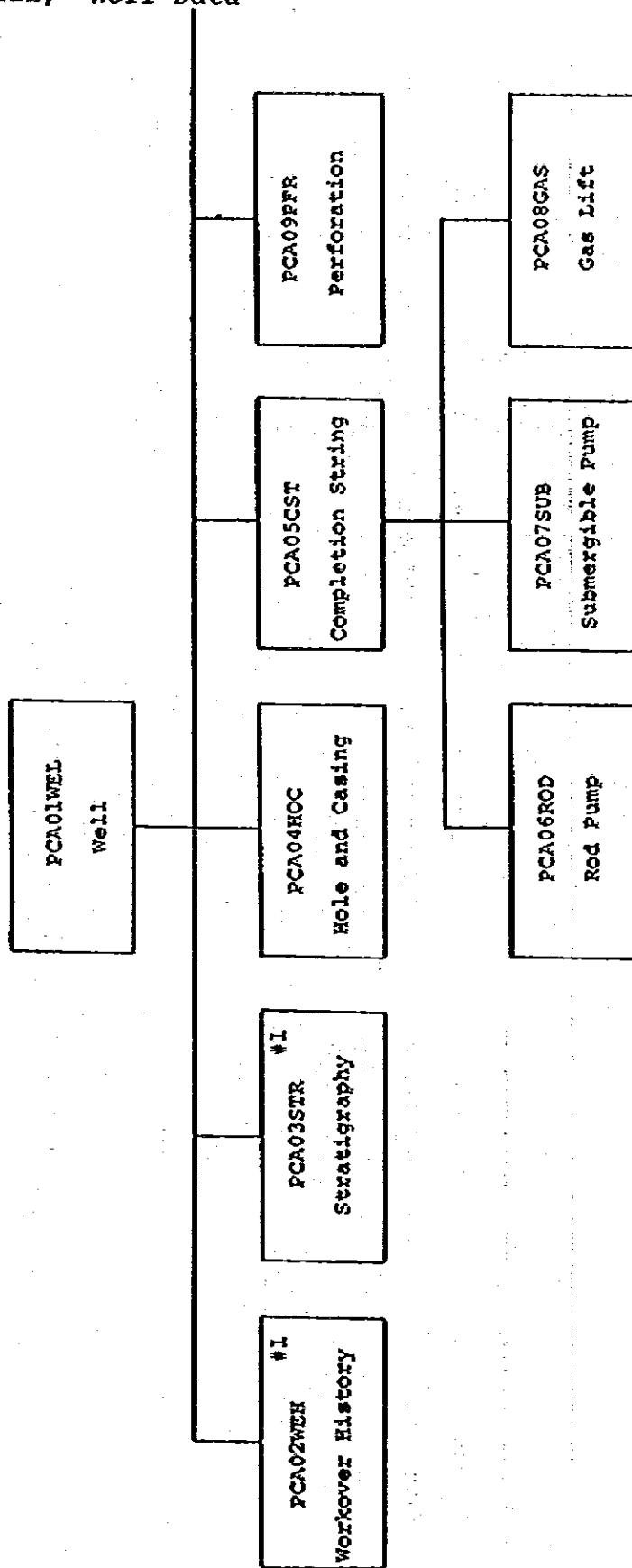
## (1) PBDOLREP, "Geophysical Report"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Report code	[KEY]			To be coded as in APPENDIX IV
1	Group name	GROUP-NM	1	X(1)	
2	Kind of report	REP-KD	2	X(2)	To be coded as in APPENDIX IV
					See NOTE 1 in page AIII-78
3	Reference number	REF-NO	4	X(7)	
2	Title	REP-TL	11	X(100)	
3	Date	REP-DT	111	X(8)	
4	Identification number	REP-IDNO	119	X(20)	
5	Storage number	REP-STORAGE-NO	139	X(10)	
6	Author	REP-AUTHOR	149	X(30)	To be coded as in APPENDIX IV
7	Company code	REP-COMPANY-CD	179	X(2)*2	To which author belongs
8	Survey Information	SURVEY-INF			
1	Survey code	SURVEY-CD	183	X(4)	To be coded as in APPENDIX IV
2	Kind of survey procedure	SURVEY-PROC-KD	187	9(1)	To be coded as in APPENDIX IV
					1. Field operation 2. Data processing 3. Interpretation
3	No. of times	NO-TIMES	188	9(1)	In case of data processing and interpretation

NOTE 1. Kind of Report

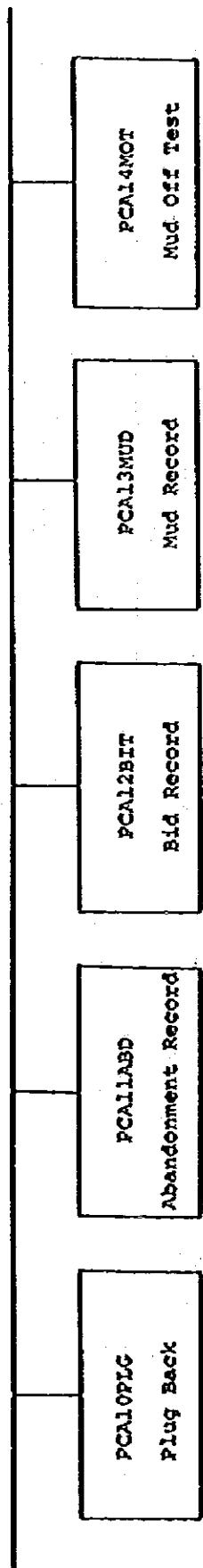
<u>Code</u>	<u>Name</u>
10	Seismic survey
11	Seismic field operation
12	Seismic data processing
13	Seismic interpretation
20	Magnetic survey
21	Magnetic field operation
22	Magnetic data processing
23	Magnetic interpretation
30	Gravity survey
31	Gravity field operation
32	Gravity data processing
33	Gravity interpretation
40	Well velocity survey
50	Special study

11 PCAWELL, "Well Data"

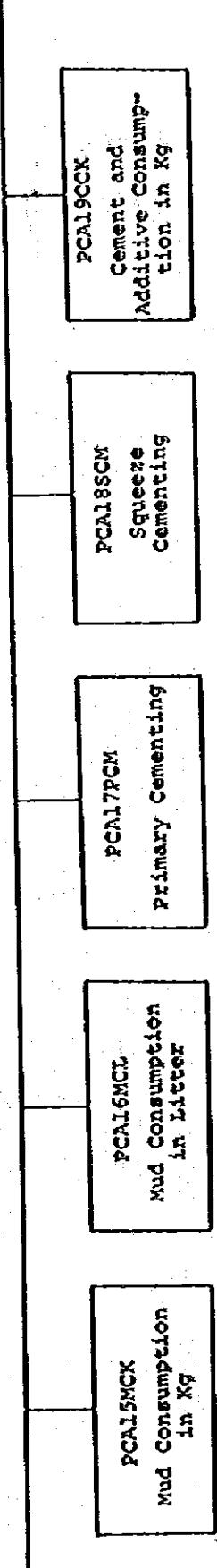


#1: This segment is applied to original well.

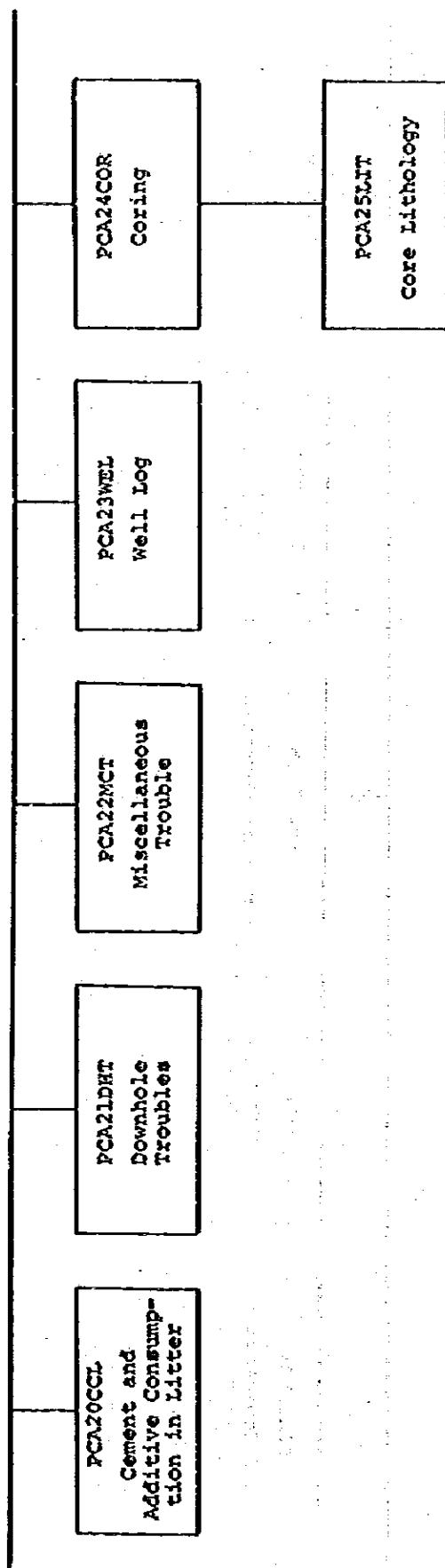
Segment Diagram of PCAWELL, "Well Data" (2/6)



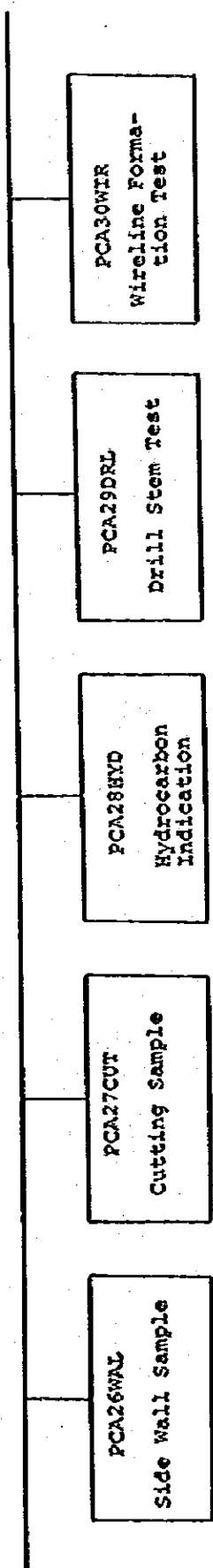
Segment Diagram of PCAWELL, "Well Data" (3/6)



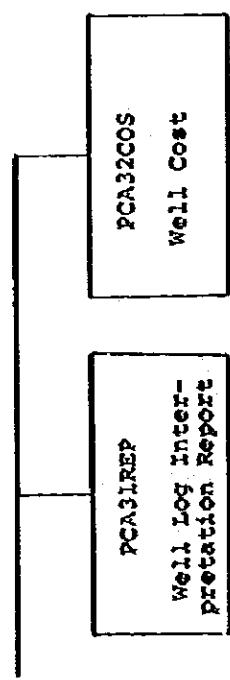
Segment Diagram of PCAWELL, "Well Data" (4/6)



Segment Diagram of PCAWELL, "Well Data" (5/6)



Segment Diagram of PCAWELL, "Well Data" (6/6)



## 11-2 Data Format of PCAWELL, "Well Data"

- (1) PCA01WEL, "Well"
- (2) PCA02WEH, "Workover History"
- (3) PCA03STR, "Stratigraphy"
- (4) PCA04HOC, "Hole and Casing"
- (5) PCA05CST, "Completion String"
- (6) PCA06ROD, "Rod Pump"
- (7) PCA07SUB, "Submergible Pump"
- (8) PCA08GAS, "Gas Lift"
- (9) PCA09PFR, "Perforation"
- (10) PCA10PLG, "Plug Back"
- (11) PCA11ABD, "Abandonment Record"
- (12) PCA12BIT, "Bid Record"
- (13) PCA13MUD, "Mud Record"
- (14) PCA14MOT, "Mud Off Test"
- (15) PCA15MCK, "Mud Consumption in Kg"
- (16) PCA16MCL, "Mud Consumption in Litter"
- (17) PCA17PCM, "Primary Cementing"
- (18) PCA18SCM, "Squeeze Cementing"
- (19) PCA19CCK, "Cement and Additive Consumption in Kg"
- (20) PCA20CCL, "Cement and Additive Consumption in Litter"
- (21) PCA21DHT, "Downhole Troubles"
- (22) PCA22MCT, "Miscellaneous Trouble"
- (23) PCA23WEL, "Well Log"
- (24) PCA24COR, "Coring"
- (25) PCA25LIT, "Core Lithology"
- (26) PCA26WAL, "Side Wall Sample"
- (27) PCA27CUT, "Cutting Sample"
- (28) PCA28HYD, "Hydrocarbon Indication"
- (29) PCA29DRL, "Drill Stem Test"
- (30) PCA30WIR, "Wireline Formation Test"
- (31) PCA31RBP, "Well Log Interpretation Report"
- (32) PCA32COS, "Well Cost"

## (1) PCA01WEL, "Well" (1/5)

Item No.	Item Name	Field Name	Position	Properties	Remarks
1-	Group key	GRP-SEQ00			
1-	Well code	WELL-CD	1	X(3)	To be coded as in APPENDIX IV
1-	Field code	FIELD-CD	1	9(3)	To be coded as in APPENDIX IV
2	Sequence number	SEQ-NO	4	9(3)	
3	Well ident.	WELL-ID	7	X(1)	
2	Workover number	WKOV-NO	8	X(2)	Ex. 0 for original well 1 for 1st workover 2 for 2nd workover
2	Province code	PROVINCE-CD	10	9(1)	To be coded as in APPENDIX IV
3	Area code	AREA-CD	11	9(2)	To be coded as in APPENDIX IV
4	Field office code	FLD-OFFICE-CD	13	9(1)	To be coded as in APPENDIX IV
5	Objective of well	WELL-OB	14	9(1)	To be coded as in APPENDIX IV
6	Objective of workover	WKOV-OB	15	9(1)	1. Wild cat 2. Delineation and/or appraisal 3. Producer 4. Injector 5. Observatory
7	Completion status	COMPL-ST	16	9(1)	To be coded as in APPENDIX IV
					1. Completed 2. Suspended 3. Abandoned

Item No.	Item Name	Field Name	Position	Properties	Remarks
8-	Formation code	FORMATION-CD			To be coded as in APPENDIX IV Objective
1	Primary objective	PRIMARY-OB	17	9(2)	
2	Secondary objective	SECOND-OB	19	9(2)*2	
9	Layer code	LAYER-CD	23	X(3)*10	To be coded as in APPENDIX IV Objective
10-	Operating date	OP-DT	53	X(8)	
1	Spud date	SPUD-DT	61	X(8)	Ex. YYYY.MM.DD
2	Date reached TD	REACH-TD-DT	69	X(8)	Ex. YYYY.MM.DD
3	Rig release date	RIG-REL-DT	77	X(8)	Ex. YYYY.MM.DD
4	Total days to TD	DAY5-TD	80	9(3)	
5	Total days	DAY5	83	9(3)	To be coded as in APPENDIX IV
11	Operator code	OPRAT-CD	86	X(10)	
12	Drilling contractor	DRL-CONTRACTOR	96	X(10)	Ex. Rig No-10
13	Rig name	RIG-NM	106	X(15)	Ex. NT 1625 DE
14	Rig type	RIG-TY	121	9(1)	To be coded as in APPENDIX IV
15	Vertical or deviated	VERT-DEVI-FG			1. Vertical 2. Deviated
16-	Sidetracking	SIDETRK	*3		
1	Date	STK-DT	122	X(8)	Ex. YYYY.MM.DD
2	Depth	STK-DP	130	9(4)V9(1)	(m)
17-	Local coordinates	LOCAL-COORD			
1	Base point	BASE-PNT	161	X(20)	
2	X	X	181	S9(8)V9(2)	[m]
3	Y	Y	191	S9(8)V9(2)	[m]

## (1) PCADIWELL, "well" (3/5)

Item No.	Item Name	Field Name	Position	Properties	Remarks
18-	Mercator coordinate	COORD			
1	Latitude (S)	LATITUDE	201	S9(6)	Ex. 99.99.99
2	Longitude (E)	LONGITUDE	207	S9(7)	Ex. 999.99.99
19	Geophysical survey code	GEOP-SURVEY	214	X(4)	To be coded as in APPENDIX IV Applied to wild cat delineation or appraisal well (seismic survey)
20	Seismic line no.	SEIS-LINE-NO	218	X(15)	Applied to wild cat delineation or appraisal well
21	Shot point no.	SHOT-PTNT-NO	233	X(11)	Applied to wild cat delineation or appraisal well
22	Well location name	WELL-LOC-NM	244	X(7)	
23-	Local coordinate	LOCAL-COORD-BH			Bottom hole location
24-	Mercator coordinate	COORD-BH			
1	Latitude (S)	LATITUDE-BH	251	X(20)	
2	Longitude (E)	LONGITUDE-BH	271	9(8)V9(2)	[m]
3	Site description	SITE-DES	281	9(8)V9(2)	[m]
25	Original derrick floor elevation	OG-DELLFLR-ELV	291	S9(6)	Bottom hole location
26	Original derrick floor height from bottom flange	OG-DELLFLR-HT	297	S9(7)	Ex. 99.99.99
27	Total depth	TOTAL-DP	304	9(2)	Ex. 999.99.99
28	Plug back depth	PLUGBACK-DP	306	9(3)V9(2)	To be coded as in APPENDIX IV See NOTE 1 in page AIII-91
29	True vertical depth	VERT-DP	311	9(3)V9(2)	[m] From wellhead lowest flange
30			316	9(4)V9(1)	[m] Ex. 9999.9
			321	9(4)V9(1)	[m]
			326	9(4)V9(1)	[m] Applied to deviated well

## (1) PONENTE, "WELL" (475)

Item No.	Item Name	Field Name	Position	Properties	Remarks
31	Stick off point	XICOP-PNT	331	9(4)V9(1) [m]	Applied to deviated well
32	Horizontal deviation	HORI-DEV	336	9(4)V9(1) [m]	Applied to deviated well
33	Mean drift angle	MEAN-DRIFT-ANGLE	341	9(2)V9(2) [deg]	Applied to deviated well
34	Kind of deviation survey	DEVI-SURVEY-KD	345	9(1)*2	To be coded as in APPENDIX IV 1. Totoco 2. Magnetic 3. Gyro
35-	Casing and tubing head assembly	CTH-ASSEMB			Ex. 13-3/8" X 9-5/8" X 3-1/2"
1	Size	CTH-SZ	347	X(30)	
2	Manufacturer	CTH-MANUFAC	377	X(10)	
3	Working pressure	CTH-WPRESS	387	9(5) [psi]	
36-	Christmas tree assembly	CHR-ASSEMB			Ex. YYYY.MM.DD
1	Date of installation	CHR-INST-DT	392	X(8)	
2	Manufacturer	CHR-MANUFAC	400	X(10)	
3	Wing valve configuration	CHR-WING-VLV	410	9(1)	To be coded as in APPENDIX IV 1. Single wing 2. Double wing [psi]
37-	Working pressure	CHR-WPRESS	412	9(5)	
	Mud log	MUD-LOG			
1	Type of logging unit	LOGUNIT-TY	416	X(20)	
2	Log interval	LOG-IV	436	9(4)V9(1) *2*2 [m]	

Item No.	Item Name	Field Name	Position	Properties	Remarks
38-	Mud Logging report	MLG-REP			
1	Date	MLG-DT	456	X(8)	
2	Reference No.	MLG-REF-NO	464	X(10)	
3	Author/Organization	MLG-AUTH-ORG	474	X(20)	
39-	Service contractor	SERV-CONTRACTOR			
1	Cementing job	SERV-CEM-JOB	494	X(15)	
2	Directional drilling	SERV-DIREC-DRI	509	X(15)*2	
3	Mud engineering	SERV-MUD-ENG	539	X(15)	
4	Mud log	SERV-MUD-LOG	554	X(15)	
5	Well Log	SERV-WELL-LOG	569	X(15)	
6	Side wall sampling	SERV-SIDE-WALL	574	X(15)	
7	Well velocity	SERV-WELL-VEL	589	X(15)	
8	Production test	SERV-PROD-TEST	604	X(15)	
9	Stimulation test	SERV-STIM-TEST	619	X(15)	
40	Time analysis	TIME-ANAL	634	9(4)V9(1) *24	[hr]
41	Current workover No.	CURR-WKOV-NO	754	X(2)	
42					See NOTE 2 in page AIII-92

**NOTE 1. Site Description**

<u>Code</u>	<u>Name</u>
1	Tidal area
2	Swamp
3	Jungle
4	Open area with forest
5	Open area with natural grass
6	Desert
7	Hill with jungle
8	Hill with forest
9	Hill with natural grass
10	Mountain (gentle)
11	Mountain (steep)
12	Glacial area
13	Offshore

**NOTE 2. Time Analysis Detailed Item**

- 01. Rig Up
- 02. Rig Down
- 03. Drilling
- 04. Round Trip
- 05. Circulation
- 06. Coring
- 07. Roaming
- 08. Under Roaming/Hole Opening
- 09. Press. Test/Inj. Test/M.O.T.
- 10. Running Casing
- 11. Cementing
- 12. Wait on Cement
- 13. Fishing
- 14. Repairing Drawworks
- 15. Repairing Power System
- 16. Repairing Mud Pump
- 17. Repairing Power Pump
- 18. Repairing Others
- 19. Formation Testing
- 20. Well Logging
- 21. Stimulation
- 22. Production Test/BHP
- 23. Comp./SWAB
- 24. Others

## (2) "PCH02MEH," "Workover History"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Workover number [KEY]	WKOV-N0	1	9(2)	Ex. YYYY-MM-DD
2	Date	DT	3	X(8)	To be coded as in APPENDIX IV
3	Completion status	COMPL-ST	11	9(1)	<ul style="list-style-type: none"> <li>1. Completed</li> <li>2. Suspended</li> <li>3. Abandoned</li> </ul>
4	Objective of workover	WKOV-OB	12	9(1)	<ul style="list-style-type: none"> <li>To be coded as in APPENDIX IV</li> <li>1. Recompletion by changing completed zone</li> <li>2. Recompletion by adding new completed zone</li> <li>3. Repair of completed zone by shut-off</li> <li>4. Mechanical repair</li> <li>5. Reopening</li> </ul>

## (3) PCN03STR, "Stratigraphy"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Stratigraphy No. Formation code	[KEY] STRATI-NO FORMATION-CD	1 9(2)		To be coded as in APPENDIX IV
2	Layer code	LAYER-CD	3 9(2)		To be coded as in APPENDIX IV
3	Interval of formation or layer	IV-FO-LA	5 X(3)		
4	Lithology	LA-NR-THICK	8 9(4)V9(1) *2		[m]
5	Layer net thickness	LA-GR-THICK	18 X(20)		
6	Layer gross thickness or formation thickness	LA-GR-THICK	38 9(3)V9(1)		[m]
7			42 9(3)V9(1)		[m]

## (4) PCA04HOC, "Hole and Casing"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Hole section and casing No. [KEY]	HOCA-N0	1	9(2)	
2	Hole size	HOLE-SZ	3	X(4)	[in] Ex. 1712 for 17 1/2" hole 0812 for 8 1/2" hole
3	Hole depth	HOLE-DP	7	9(4)V9(1)	[m]
4	Casing size	CASING-SZ	12	X(4)	[in] Ex. 1338 for 13 3/8" casing 0700 for 7" casing
5	Casing set date	CASING-DT	16	X(8)	Ex. YYYY.MM.DD
6-	Type of casing	CASING-TV		*4	
1	Grade	CAS-GRADE	24	X(6)	Ex. P-110
2	Weight	CAS-WEIGHT	30	9(3)V9(2)	[Lbs./ft.]
3	Set depth/interval	CAS-SET-DR-IV	35	9(4)V9(1)	[m]
7	Liner hanger	LIN-HANG	108	X(30)	In case of liner set brief description on liner hanger manufacturer, model, etc.
8	Liner slot interval	LIN-SLOT-IV	138	9(4)V9(1)	*2 [m]

## (5) PCAO5CST, "Completion String"

Item No.	Item Name	Field Name [KEY]	Position Properties	Remarks
1	String code	STRING-CD	1 9(1)	To be coded as in APPENDIX IV 1. S: Short length tubing 2. M: Middle length tubing 3. L: Long length tubing 4. A: Annulus
2	String specification	STRING-SPEC	2 9(1)	To be coded as in APPENDIX IV 1. Ordinary string 2. Rod Pump 3. Submergible pump 4. Gas lift 5. Dump flood water injection 6. Powered water injection 7. Gas injection
3	Completed interval	COMPL-IV	3 9(4)V9(1) [m]	
4-	Tubing Size Weight Grade Depth Packer depth	TUB TUB-SZ TUB-WEIGHT TUB-GRAD TUB-DP PACK-DP	103 9(1)V9(3) 107 9(2)V9(2) 111 X(6) 117 9(4)V9(1) 122 9(4)V9(1) *2	[in] [lbs./ft.] Ex. P-110 [m] Depth at tail end of string [m]

## (6) "PCAOGRD, "Rod Pump" (I/2)

Item No.	Item Name	Field Name	Position	Properties	Remarks
1-	Subsurface pump	SUBSUSP-PUMP	1	X(8)	Ex. YYYY.MM.DD
1	Installation date	SS-INST-DT	9	X(15)	
2	Manufacturer	SS-MANUFAC			To be coded as in APPENDIX IV
3	Type	SS-TY	24	9(1)	
4	Size	SS-SZ	25	9(1)V9(3)	
5	Depth	SS-DP	29	9(4)V9(1)	[m]
2	Gas anchor	GAS-ANC	34	9(1)	[m]
					To be coded as in APPENDIX IV
					1. With gas anchor
					2. Without gas anchor
3	Anchor catcher depth	ANC-CAT-DP	35	9(4)V9(1)	[m]
4-	Surface pump	SUP-PUMP			
1	Installation date	ST-INST-DT	40	X(8)	Ex. YYYY.MM.DD
2	Manufacturer	ST-MANUFAC	48	X(15)	
3	Type	ST-TY	63	9(1)	To be coded as in APPENDIX IV
4	Model	ST-MODEL	64	X(15)	1. Crank counter balance
5	Ident. No.	ST-IDNO	79	X(10)	2. Beam counter balance
					3. Air balance
					4. Other

## (6) PCAOGROD, "Rod Pump" (2/2)

Item No.	Item Name	Field Name	Position	Properties	Remarks
5-	Prime mover	PRIME-MOVER	89	X(8)	Ex. XXXX,MM,DD
1	Installation date	PM-INST-DT	97	X(15)	
2	Manufacturer	PM-MANUFAC	97	X(15)	To be coded as in APPENDIX IV
3	Type	PM-TY	112	9(1)	
					1. Electric-motor 2. Gas engine 3. Gasoline engine 4. Diesel engine
4	Model	PM-MODEL	113	X(10)	
5	Ident. No.	PM-IDNO	123	X(10)	

## (7) DGN07SUB, "Submersible Pump"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Installation date	INST-DT	1	X(8)	Ex. YYYY.MM.DD
2	Manufacturer	MANUFAC	9	X(15)	
3	Model	MODEL	24	X(15)	
4	Size	SZ	39	X(25)	Pump dia. x length
5	Depth at intake	INTAKE-DP	64	9(4)V9(1)	[m]
6	Gas separator	GAS-SEP	69	9(1)	To be coded as in APPENDIX IV
7	Ident. No.	IDNO	70	X(10)	1. With gas separator 2. Without gas separator

## (8) PC00GAS, "Gas Lift"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Installation date	INST-DT	1	X(8)	Ex. YYYY-MM-DD
2	Type of lifting	LIFT-TY	9	9(1)	To be coded as in APPENDIX IV
3	Type of installation	INST-TY	10	9(1)	<ul style="list-style-type: none"> <li>1. Continuous</li> <li>2. Intermittent</li> </ul> To be coded as in APPENDIX IV
4	Macaroni Pipe	MACARONI-PIPE	11	9(1)	<ul style="list-style-type: none"> <li>1. Open installation</li> <li>2. Semiclosed installation</li> <li>3. Closed installation</li> <li>4. Chamber installation</li> </ul> To be coded as in APPENDIX IV
5-	Macaroni pipe data	MP-DATA	12	9(1)V9(3)	[In]
1	Size	MP-SZ	16	9(4)V9(1)	[m]
2	Length	MP-LN		*15	
6-	Gas lift valve	GAS-LIFT-VLV			
1	Manufacturer	GV-MANUFAC	21	X(15)	
2	Model	GV-MODEL	36	X(10)	
3	Port size	GV-PORT-SZ	46	X(8)	
4	Depth	GV-PP	54	9(4)V9(1)	[m]
7-	Surface controller	SURF-CON			
1	Installation date	SC-INST-DT	591	X(8)	Ex. YYYY-MM-DD
2	Manufacturer	SC-MANUFAC	599	X(15)	
3	Model	SC-MODEL	614	X(15)	

### (9). CROSSLINKING, "PERFORATION."

Item No.	Item Name	Field Name	Posi- tion	Proprie- ties	Remarks
1	Perforation No.	[KEY]			
2	Date				Ex. YYYY.MM.DD
3	Objective of perforation				To be coded as in APPENDIX IV
4	Interval				
5	Type of perforation	PERFORATION-TY	1 9(2) 3 X(8)	1. Completion. 2. Squeeze cementing 3. Test 4. Other	
6	Size of perforation	PERFORATION-SZ	11 9(1)		
7	Number of shot	NO-SHOT	12 9(4)V9(1)*2	[m]	
8	Density of shot	DENS-SHOT	22 X(15)	Ex. Al. UniJet	
9	Casing/liner perforated	CAS-LIN-PERFORATED	37 X(8)		
10	Status of perforation	PERFORATION-ST	45 9(3) 48 9(1) 49 X(4)*2	[shots/ft] [in]	To be coded as in APPENDIX IV
			57 9(1)		
					1. Opened 2. Closed

## (10) PCA10PLC, "Plug Back"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Plug No.	[XER]		1 9(2)	
2	Date of set	PLUG-NO	3	X(8)	Ex. YYYY.MM.DD
3	Kind of plug back	SET-DT	9(1)		To be coded as in APPENDIX IV
		PLUG-BK-XID			
4	Depth/interval	DP-TV	12	9(4)V9(1) *2	
5	Model of bridge plug	BRIDGE-PLUG-MODEL	22	X(10)	Ex. HOWCO EZ to be applied to the plugs which were left in hole at completion.

## (11) PCU1ABD, "Abandonment Record"

Item No.	Item Name	Field Name	Properties	Position	Remarks
1	Reason of abandonment	ABAND-REAS	X(100)*2	1	
2	Hole condition	HOLE-COND	X(100)*2	201	

## (12) PCA12BIT, "Bid Record"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Run No.	[KEY]			
2	Bit size	RUN-NO BIT-SZ	1 3	9(2) X(6)	[in] Ex. 170102 for 17 1/2" bit 071332 for 7 13/32"
3	Model	MODEL	9	X(10)	
4	Interval	IV	19	9(4)V9(*2)	[m]
5	Hours	HOURS	29	9(3)V9(2)	[hr]
6-	Bit condition	BIT-COND			See NOTE 1 in page AIII-105.
1	Tooth dullness	TOOTH-DULL	34	X(3)	
2	Bearing condition	BEARING-COND	37	X(1)	
3	Bit gage	BIT-GAGE	39	X(3)	

**NOTE 1. Bit Condition**

Bit condition to be indicated in accordance with IADC-API reporting method  
(Example)

1. Indication of tooth dullness in eights

<u>Indication of tooth dullness</u>	<u>Explanation</u>	<u>Insert bit</u>
1	mild tooth bit	
2	Tooth height 1/8 gone	1/8 of inserts lost or broken
3	Tooth height 1/4 gone	1/4 of inserts lost or broken
4		
5		
6		
7		
8	Tooth height all gone	All of inserts lost or broken

If any one row has a majority of teeth broken, add the letters ("BT")

2. Indication of bearing condition in eights

<u>Indication of bearing condition</u>	<u>Explanation</u>	<u>Insert bit</u>
1		1/8 of bearing life used
2		1/4 of bearing life used
3		
4		
5		
6		
7		
8	Bearing life all gone	

3. Indication of bit gage

<u>Indication of bit gage</u>	<u>Explanation</u>	<u>Insert bit</u>
I	In gage	
-10	If out of gage, amount of gage in millimetre (this example shows 10mm out of gage)	

## (1.3) PCAL3MUD, "Mud Record"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Mud record No. Interval	MUD-REC-NO IV	1 3	9(2) 9(4)V9(1) *2	[m]
2	Type of mud	MUD-TY	13	9(1)	to be coded as in APPENDIX IV
3					1. Fresh water base 2. Salt water base 3. Oil in water emulsion 4. Others
4-	Average mud properties				
1	Weight (SG)	AVMUD-PROP WEIGHT	14	9(1)V9(2) *2	Ex. 1.05 - 1.10
2	Viscosity	VISCOSITY	20	9(3)*2	[sec] Ex. 105 - 110
3	Water loss	WAT-LOSS	26	9(2)V9(1) *2	[cc] Ex. 10.5 - 11.0
4	Sand content	SAND-CONT	32	9(2)V9(1) *2	[%] Ex. 10.5 - 11.0
5	Salt content	SALT-CONTENT	38	9(6)*2	[ppm] Ex. 10500 - 110000
6	Oil content	OIL CONTENT	50	9(2)V9(1) *2	[%] Ex. 10.5 - 11.0
7	p.H	p.H	56	9(2)V9(1) *2	Ex. 10.5 - 11.0

## (14) PCN14MOTL "Mud Off Test"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Test No.	[KEY]	1	9(2)	
2	Tested date	TESTED-DT	3	X(8)	Ex. YYYY-MM-DD
3	Tested depth	TESTED-DP	11	9(4)V9(1)	[m]
4	Equivalent weight of leak off pressure	LEAKOFF-PRESS	16	9(1)V9(2)	[kg/cm <sup>2</sup> /10m]

## (15) PCALSMCK, "Mud Consumption in Kg"

Item No.	Item Name	Field Name	Properties	Remarks
			Position	
1	Kind of mud agents [KEY]	MUDAGEN-KD	1 9(2)	To be coded as in APPENDIX IV See NOTE 1 in page AIII-109
2	Consumption [kg]	CONSUMPTION	3 9(6)	

**NOTE 1. Kind of Mud Agent (in kg)**

<u>Code</u>	<u>Name</u>
01	Bentonite
02	Barite
03	CMC L
04	CMC H
05	Spersene
06	Resinex (Durenex)
07	Q-broxin
08	XP-20
09	CC-16
10	Caustic Soda
11	SAFP
12	Mica F/M/C
13	Mud Fibre

## (16) PCAL6MCL, "Mud Consumption in Litter"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Kind of mud agents [KEY]	MUDAGEN-KD	1	9(2)	To be coded as in APPENDIX IV 01. Drilling detergent 02. Pip lax 03. Diesel oil [A]
2	Consumption	MUD=CONSUMPTION	3	9(6)	

## (17) PCNITPCM, "Primary Cementing"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Cementing No.	[KEY]	CEMENT-NO	1 9(2)	Ex. YYYY.MM.DD
2	Cementing date		CEMENT-DT	3 X(8)	[in]
3	Casing size		CASING-SZ	11 X(4)	Ex. Shoe, DV-1 or SC-1 etc.
4	Stage name		STAGE-NM	15 X(5)	(SC: Stage cementer)
5	Depth		DP	20 9(4)V9(1)	[m]
6-	Cement	CEMENT			
1	Type of cement	CEMENT-TY	25	X(15)	Ex. Class C
2	Additives	CEMENT-	40	X(30)	Ex. 5% CACI2
		ADDITIVES			
3	Slurry weight (SG)	CEMENT-SG	70	9(1)V9(2)	
4	Cement bulk amount	CEMENT-BAMOUNT	73	9(6)	[kg]

## (18) PCAL8SCM, "Squeeze Cementing"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Squeeze No.	[KEY]			
2	Date	SQUEEZE-NO DT	1 3	9(2) X(8)	Ex. YYYY.MM.DD To be coded as in APPENDIX IV
3	Objective of squeeze cement	SQUEEZE-OBJ	11	9(1)*3	1. Supplementing primary cement 2. Sealing off undesired perforation 3. Plugging channel 4. Repairing damaged casing
4	Interval	IV	14	9(4)V9(1) *2*3	[m]
5-	Cement data	CEMENT-DATA			
1	Type of cement	CEMENT-TY	44	X(15)	
2	Additives	CEMENT- ADDITIVES	59	X(30)	Ex. 2% CACl2
3	Slurry weight (SG)	CEMENT-SG	89	9(1)V9(2)	
4	Cement bulk amount	CEMENT- BAMOUNT	92	9(6)	[kg]
6	Average squeezing injection rate	AVSQ-INJECT- RATE	98	9(4)V9(1)	[L/min]
7	Squeezing final pressure	SQFI-PRESS	103	9(3)V9(1)	[kg/cm <sup>2</sup> ]
8	Comment on result	COMMENT-RESULT	107	X(40)	

## (19) PCNICK, "Cement and Additive Consumption in Kg"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Kind of cement and additives [REX]	CIMADD-KD	1	9(2)	To be coded as in APPENDIX IV 01- Class C 02- Class D 03- Litepoz 04- CaCL2 05- Bentonite 06- D28 Retardar 07- D13 Retardar 08- D60 Flac [kg]
2	Consumption	CONSUMPTION	3	9(6)	

## (20) PCA20CCL, "Cement and Additive Consumption in Litter"

Item No.	Item Name	Field Name	Properties	Position	Remarks
1	Kind of cement and additives [XXX]	CEMADD-XD	1	9(2)	To be coded as in APPENDIX IV 01. D47 - Antifoam 02. CW-7 Mud wash [2]
2	Consumption	CONSUMPTION	3	9(6)	

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## (21) PCA21DHT, "Downhole Troubles"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Trouble No.	[KEY]	1	9(2)	To be coded as in APPENDIX IV
2	Kind of trouble	TROUBLE-NO TROUBLE-KD	3	9(1)	1. Lost circulation problem 2. Hole sloughing problem 3. Pipe sticking problem 4. Well control problem 5. Water flow problem 6. Deviation control problem 7. Down hole equipment failure 8. Others
3	Date emerged		4	X(8)	Ex. YYYY.MM.DD
4	Date overcome	EMERGE-DT OVERCOME-DT	12	X(8)	Ex. YYYY.MM.DD
5	Depth	DP	20	9(4)V9(1) *2	Brief description on the hole condition and the treatment method
6	Summary of trouble	TROUBLE-SUM	30	X(100)*2	

## (22) PCA22MCT, "Miscellaneous trouble"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Trouble No. Summary of miscellaneous troubles	[KEY]	1	9(2)	Brief description on various troubles long term rig repair, severe cementing troubles etc. Other than down hole troubles as described in PCA22.
2		TROUBLE-NO MISCTROUB- SUM	1 3	X(100)*2	

## (23) PCA23WEL, "Well Log"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Run No.	[KEY]	RUN-NO	1 9(2)	
2	Kind of log		LOG-KD	3 9(2)*4	To be coded as in APPENDIX IV See NOTE 1 in page AIII-118.
3	Interval		IV	11 9(4)V9(1)	[m]
4	Scale	SC	21 9(1)*3	"2	To be coded as in APPENDIX IV
					1. 1:200
					2. 1:500
					3. 1:1000
5	Survey Date	SURVEY-DT	24 X(8)		Ex. YYYY.MM.DD
6	Ident. No.	IDNO	32 X(10)		Your reference No.

NOTE 1. Kind of Log

<u>Code</u>	<u>Name</u>	<u>Abbreviation</u>
01	Spontaneous-Potential	SP
02	Electric Log	EL
03	Induction Log	IES
04	Dual Induction Laterolog	DIL
05	Laterology	LL
06	Microlog	ML
07	Microlaterology	MLL
08	Proximity Log	PML
09	Micro-Spherical Focused Log	MSFL
10	Sonic Log	SL
11	Borehole Compensated Sonic	BHC-
12	Directional Survey	DSVY
13	C D M	CDM
14	H D T	HDT
15	Temperature Survey	TS
16	Cement Bond Log	CBL
17	V D L	VDL
18	Litho Density Log	LDT
19	Gamma Ray Log	GR
20	Neutron Log	CNL
21	Formation Density Log	FDC
22	Casing Collar Log	CCL

(24) PCA24COR, "Coring" report form

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Core No.	[KEY]		CORE-NO	1 9(2)
2	Coring date			CORING-DT	3 X(8)
3	Interval			IV	11 9(4)V9(1)*2 [m]
4	Recovery			RECOVERY	21 9(2)V9(1) [m]
5	Core size			CORE-SZ	24 X(5) [in]
6	Type of coring bit			CORING-BIT-TY	29 9(1) To be coded as in APPENDIX IV.
7	Type of barrel			BARREL-TY	30 9(1) 1. Roller bit 2. Diamond bit 3. Wire line 4. Rubber sleeve 5. Oriented core
8	Reference report No.			REF-REP-NO	31 X(10)

## (25) PCN2SLIT, "Core Lithology"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Core lithology No.	[KEY]	CORE-LITHOLOGY -NO	1 9(2)	
2	Interval selected	SEL-IV		3 9(4)V9(1) *2	[m]
3-	Lithology	LITHOLOGY			
1	Main lithology	MAIN-LITHOLOGY	13	X(10)	
2	Others	OTHERS	23	X(10)	
4-	Characteristics of lithology	CHARAC-LITHOLOGY			
1	Sorting	SORTING	33	X(6)	
2	Hardness	HARDNESS	39	X(6)	
3	Grain size	GRAIN-SZ	45	X(9)	
4	Porosity	POROSITY	54	9(2)V9(1)	[%]
5	Colour	COLOUR	57	X(5)	

## (26) PCA26WIL, "Side Wall Sample"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Sample No.	[KEY]	1	9(2)	
2	Sampling date	SAMPLE-NO.	3	X(8)	Ex. YYYY.MM.DD
3	Sample depth	SAMPLE-DT	11	9(4)V9(1)	[m]
4	Recovery	SAMPLE-DP	16	9(3)	[%]
5	Lithology	RECOVERY	19	X(10)	
6	Porosity	LITHOLOGY	29	9(2)V9(1)	[%]
7	Colour	POROSITY	32	X(5)	
8	Grain size	COLOUR	37	X(9)	
9	Sorting	GRAIN-SZ	46	X(6)	
10	Hardness	SORTING	52	X(6)	
11	Reference report No.	HARDNESS	58	X(10)	
		REF-REP-NO			

## (27) PCA27CUT, "Cutting Sample"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Sample No.	[KEY] SAMPL-NO	1	9(2)	
2	Sampling interval	SAMPL-IV	3	9(4)V9(1) *2 [m]	
3	Sampling frequency	SAMPL-FREQ	13	9(2)	
4	Reference report No.	REF-REP-NO	15	X(10)	

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## (28) PCA2881D "Hydrocarbon Indication"

Item No.	Item Name	Field Name	Properties	Position	Remarks
1	Indication No. Interval	[KEY]	INDICATION-NO IV	1 9(2) 3 9(4)V9(1) *2	[m]
2	Lithology	LITHOLOGY	X(10)	23 9(1)	To be coded as in APPENDIX IV
3	Fluorescence show	FLUOR-SHOW			1- Very weak 2- Weak 3- Moderate 4- Good 5- Excellent
4					(VWK) (MOD) (GD) (EXC)
5-	Gas chromatogram component	GASCHROM- COMPONENT			
2	C1	C1	24 9(2)V9(1)	[8]	
2	C2	C2	27 9(2)V9(1)	[8]	
3	C3+	C3P	30 9(2)V9(2)	[8]	
4	Selected depth	SEL-DRP	34 9(4)V9(1)	[m]	
6	Solvent	SOLVENT	39 9(1)		The same code as "fluorescence show"
7	Porosity	POROSITY	40 9(2)V9(1)	[8]	Log evaluation result
8	Wat-Sat	WAT-SAT	43 9(3)V9(1)	[8]	Log evaluation result
	Water saturation				

## (29) FCA29DRU, "Drill Stem Test" (1/3)

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Test No.	[KEY]	TEST-NO.	2 9 (2)	
2	Tested Period		TESTED-PD	3 X(10) *2	EX. YYYY.MM.DD.HH-YYYY.MM.DD.HH
3	Service Contractor		SERV-CONTRACTOR	23 X(15)	
4	Type of DST		DST-TY	38 9(1)	To be coded as in APPENDIX IV
5	Test interval				1. Open hole 2. Cased hole
6	Swabbing operation		TEST-FV	39 9(4)V9(1)*2	
			SWABB-OP	49 9(1)	To be coded as in APPENDIX IV
					1. Carried 2. Not carried out
7-	Fluid recovery		FLUID-RECOV		
1	Cumulative oil recovery		CUM-OIL-RECOV	50 9(3)V9(2)	[m <sup>3</sup> ]
2	Cumulative gas recovery		CUM-GAS-RECOV	55 9(3)V9(3)	[x10 <sup>3</sup> m <sup>3</sup> ]
3	Cumulative water recovery		CUM-WAT-RECOV	61 9(3)V9(2)	[m <sup>3</sup> ]
4	Oil cut mud		OIL-CUT-MUD	66 9(3)V9(2)	[m <sup>3</sup> ]
5	Gas cut mud		GAS-CUT-MUD	71 9(3)V9(2)	[m <sup>3</sup> ]
6	Water cut mud		WAT-CUT-MUD	76 9(3)V9(2)	[m <sup>3</sup> ]
7	Oil water cut mud		OILWAT-CUT-MUD	81 9(3)V9(2)	[m <sup>3</sup> ]
8	Gas water cut mud		GASWAT-CUT-MUD	86 9(3)V9(2)	[m <sup>3</sup> ]

Item No.	Item Name	Field Name	Position	Properties	Remarks
8-	Fluid recovery in chamber	FLUID-RECOV-CHAMB			
1	Oil volume	OIL-VOL	91	9 (4) [cc]	
2	Gas volume	GAS-VOL	95	9 (1) V9 (3) [m3]	
3	Water volume	WAT-VOL	99	9 (4) [cc]	
4	Mud volume	MUD-VOL	103	9 (4) [cc]	
5	Oil specific gravity	OIL-SPEC-GRAV	107	9 (1) V9 (3)	
6	Gas specific gravity	GAS-SPEC-GRAV	111	9 (1) V9 (3)	
7	Salinity of water	SALINITY-WAT	115	9 (6) [ppm]	
9-	Pressure & temperature	PRESS-TEMP	121	9 (3) V9 (1) [kg/cm2]	
1	Bottom hole shut in pressure	BHOLE-PRESS	125	9 (3) [°C]	
2	Bottom hole temperature	BHOLE-TEMP	125	9 (3) [kg/cm2]	
3	Well head flowing pressure	WELL-HEAD-PRESS	128	9 (3) V9 (1) [kg/cm2]	
4	Choke size	CHOKE-SZ	132	9 (3) [mm]	
10-	Test analysis result	TEST-ANAL-RESULT			
1	Static pressure (P)	STATIC-PRESS	135	9 (3) V9 (1) [kg/cm2]	
2	Flow capacity (Qh)	FCAPAC	139	9 (5) V9 (2) [md-m]	
3	Permeability (K)	PERMEAB	146	9 (4) V9 (2) [md]	
4	Skin factor (S)	SPACT	152	S9 (2) V9 (2)	
5	Damage ratio (DR)	DAM-RAT	156	9 (2) V9 (2) [m3/d/kg/cm2]	
6	PI ideal	PI-IDEAL	160	9 (3) V9 (2) [m3/d/kg/cm2]	
7	PI actual	PI-ACTUAL	165	9 (3) V9 (2) [m3/d/kg/cm2]	
8	Flow efficiency	EFFTIC	170	9 (1) V9 (2) [103 std m3/d]	
9	Open flow potential	OPEN-OPPTNT	173	9 (3) V9 (2) [103 std m3/d]	
10	Q max	QMAX	178	9 (4) V9 (2) [m3/d]	

## (29) PCA29DRC, "Drill Stem Test" (3/3)

Item No.	Item Name	Field Name	Position	Properties	Remarks
11-	Drill stem test report	DST-REP			
1	Date	DST-DT	184	X(8)	Ex. YYYY.MM.DD
2	Reference No.	DST-REF-NO	192	X(10)	
3	Author/organization	DST-AUTH-ORG	202	X(20)	
12-	Fluid analysis report	FLUID-ANAL-REP			
4	Title	FLA-TL	222	X(30)	
2	Date	FLA-DT	252	X(8)	Ex. YYYY.MM.DD
3	Reference No.	FLA-REF-NO	260	X(10)	
4	Author/organization	FLA-AUTH-ORG	270	X(20)	

## (30) PCN300WIR, "Wireline Formation Test" (1/2)

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Test No.	TEST-NO	1	9 (2)	
2	Tested date	TESTED-DT	3	X (8)	Ex. YYYY.MM.DD
3	Service contractor	SERV-CONTRACTOR	11	X (15)	
4	Tested depth	TESTED-DT	26	9 (4)V9 (1)	[m]
5	Succeeded or not	SUCCEED-TC	31	9 (1)	To be coded as in APPENDIX IV
					1. Succeeded 2. Not succeeded
6-	Fluid recovery in chamber	FLUID-RECOV-CHAMB			
1	Oil volume	OIL-VOL	32	9 (5)	[cc]
2	Gas volume	GAS-VOL	37	9 (1)V9 (3)	[m <sup>3</sup> ]
3	Water volume	WAT-VOL	41	9 (5)	[cc]
4	Filtrate	FILTRATE	46	9 (5)	[cc]
7-	Test analysis result	TEST-ANAL-RESULT			
1	Kind of fluid estimated	FLUID-EST-KD	51	9 (1)	To be coded as in APPENDIX IV
					1. Gas 2. Oil 3. Water
2	Static pressure (P)	STATIC-PRESS	52	9 (3)V9 (1)	[kg/cm <sup>2</sup> ]
3	Permeability (K)	PERMEAB	56	9 (4)V9 (2)	[md]
8-	Test report	TEST-RPT			
1	Title	TST-TL	62	X (30)	
2	Date	TST-DT	92	X (8)	Ex. YYYY.MM.DD
3	Reference No.	TST-RPT-NO	100	X (10)	
4	Author/organization	TST-AUTH-ORG	110	X (20)	

## (30) PCA30WIR, "Wireline Formation Test" (2/2)

Item No.	Item Name	Field Name	Position	Properties	Remarks
9-	Analysis report	ANAL-REP			
1	Title	ANL-TL	130	X(30)	
2	Date	ANL-DT	160	X(8)	
3	Reference No.	ANL-REF-NO	168	X(10)	
4	Author/organization	ANL-AUTH-ORG	178	X(20)	

## (31) PCA31REP, "Well Log Interpretation Report"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Kind of Interpretation [XXX]	INT-KD	1 9(2)	to be coded as in APPENDIX IV 1. Quick look 2. Computer processed by PERTAMINA	
				3. CPI 4. HDT 5. CSU 6. Cyber dip EX. XXXX-MM-DD	
2	Date	INT-DT	3 X(8)		
3	Reference No.	INT-REF-NO	11 X(10)		
4	Author/Organization	INT-AUTH-ORG	21 X(20)		

## (32) PCA32COS, "Well Cost"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1-	Well cost	WELL-CR	"40		See NOTE 1 in page AIII-131
1	RP	RP-CR	1	9(10)	[RP]
2	USS	US-CR	11	9(7)	[USS]

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**NOTE 1. Well-cost detailed item**

**Access and Preparation**

1. Access - Land
2. Access - Marine
3. Well site
4. Marine Platform
5. Derrick erection/dismantling
6. Service lines
7. Indemnities

**Drilling**

8. Rigging up/down
9. Drilling consumables - surface
10. Drilling consumables - subsurface
11. Drilling string maintenance
12. Payment under contract
13. Mud
14. Fuel, lubricating oil, greases, steam, electricity
15. Water

**Casing**

16. Casing
17. Cementing

**Subsurface evaluation**

18. Subsurface evaluation

**Completion**

- 19. Stimulation treatments
- 20. Completion and production testing

**Salaries/wages**

- 21. Crew salaries/wages
- 22. Drilling department overhead

**Transport-rig move**

- 23. Transport-rig move Land
- 24. Water
- 25. Air

**Transport-other**

- 26. Transport-other-Land
- 27. Water
- 28. Air

**Well equipment**

- 29. Well head equipment
- 30. Subsurface lifting equipment

**Temporary camp**

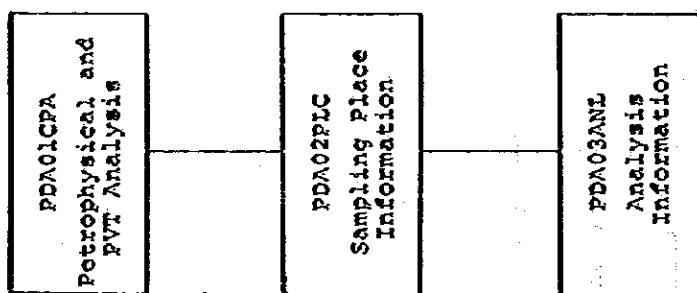
- 31. Temporary camp facilities
- 32. Camp operation and service

**Depreciation**

- 33. Drilling string
- 34. Marine drilling unit
- 35. Transport - Land
- 36. Water
- 37. Air
- 38. Spec. and heavy equipment
- 39. Other items
- 40. Field and district overhead
- 41. General overhead
- 42. Depreciation on overhead facilities

## 12 PDA01CPA, "Petrophysical and PVT Analysis Data"

12-1 Segment Diagram of PDA01CPA, "Petrophysical and PVT Analysis Data"



**12-2 Data Format of PDAPTPVT, "Petrophysical and PVT  
Analysis Data"**

- (1) PDA01CPA, "Petrophysical and PVT Analysis"**
- (2) PDA02PLC, "Sampling Place Information"**
- (3) PDA03ANL, "Analysis Information"**

## (1) PDACICPA, "Petrophysical and PVT Analysis"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1-	Analysis code Kind of analysis	[KEY] ANAL-CD ANAL-KD	1 9(1)		to be coded as in APPENDIX IV to be coded as in APPENDIX IV
2	Sequence number	SEQ-NO	2	9(3)	
2	Province code	PROVINCE-CD	5	9(1)	to be coded as in APPENDIX IV
3	Area code	AREA-CD	6	9(2)	to be coded as in APPENDIX IV
4	Field office code	FLDOFFICE-CD	8	9(1)	to be coded as in APPENDIX IV
5	Well code	WELL-CD	9	X(7)	to be coded as in APPENDIX IV
6-	Order document	ORD-DOCUM	16	X(8)	
1	Date	ORD-DT	24	X(20)	Ex. YYYY.MM.DD
2	Order document number	ORD-NO			
7-	Invoice	INVOICE			
1	Date	INV-DT	44	X(8)	Ex. YYYY.MM.DD
2	Invoice number	INV-NO	52	X(15)	
8-	Sample analysis report	SAMPLE-ANAL-REP			
1	Title	SA-TITLE	67	X(100)	
2	Date	SA-DT	217	X(8)	
3	Author	SA-AUTHOR	225	X(30)	
4	Organization of author	SA-AUTH-ORG	255	X(50)	
5	Location of laboratory	LOCATION-LABORATORY	305	X(30)	
9-	Total cost	TOTAL-CT			
10-	RP	RP-CT	335	9(8)V9(2)	
1	USS	US-CT	345	9(5)V9(2)	

## (2) PDAOZPLC, "Sampling Place Information"

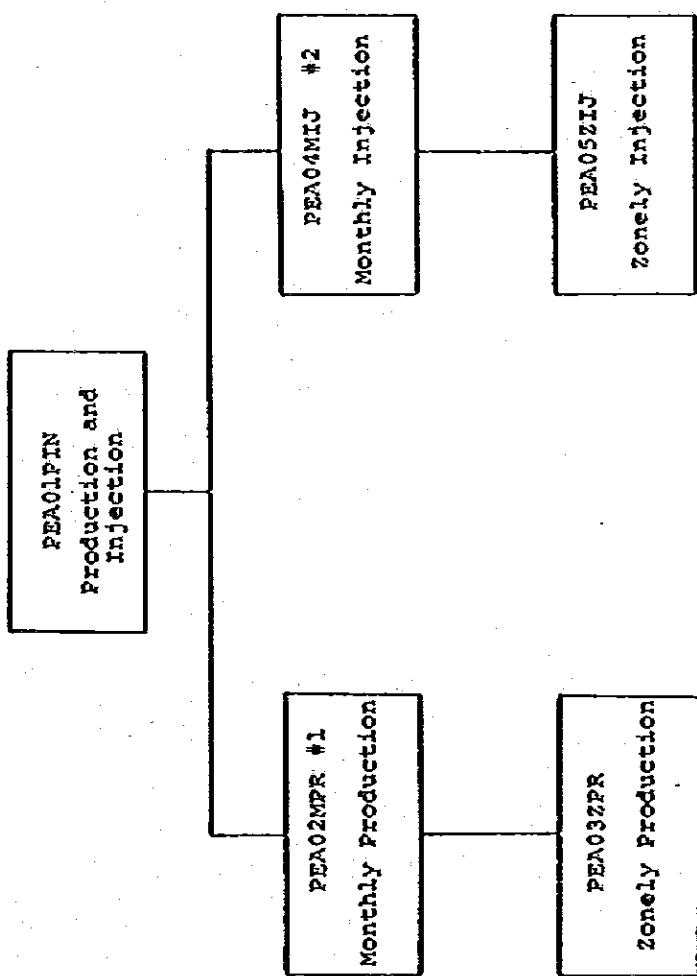
Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Sampling identification [KEY]	SAMPL-ID	1	9(2)	
2	Formation code	FORMATION-CD	3	9(2)	To be coded as in APPENDIX IV
3	Reservoir unit code	RESERV-CD	5	X(4)	To be coded as in APPENDIX IV
4	Layer code	LAYER-CD	9	X(3)	To be coded as in APPENDIX IV
5	Sampling period	SAMPL-PD	12	X(8)*2	Ex. YYYY.MM.DD-YYYY.MM.DD
6	Kind of sampling	SAMPL-KD	28	9(1)	In case of core analysis
7	Kind of sample	SAMPLE-KD	29	9(1)	To be coded as in APPENDIX IV.
					To be coded as in APPENDIX IV - Plug size -
					1. Conventional coning (CCP) - Full diameter -
					2. Conventional coning (CCF) - Full diameter -
					3. Sidewall coning (SWC)
					In case of PVT analysis
					To be coded as in APPENDIX IV
					1. Subsurface sample (SS)
					2. Recombined sample (RS)

## (3) PDA03ANL, "Analysis Information"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Kind of analysis performed [KEY]	ANAL-PERF-KD	1	9(2)	To be coded as in APPENDIX IV
2	Number of samples	AP-NO-SAMPLES	3	9(3)	

13-1 Segment Diagram of PEAPRDIN, "Production and Injection"

13 PEAPRDIN, "Production and Injection"



#1: This segment is applied to production.

#2: This segment is applied to injection.

**13-2 Data Format of PEAPRDIN, "Production and Injection"**

- (1) PEA01PIN, "Production and Injection"**
- (2) PEA02MPR, "Monthly Production"**
- (3) PEA03ZPR, "Zonely Production"**
- (4) PEA04MIJ, "Monthly Injection"**
- (5) PEA05ZIJ, "Zonely Injection"**

(1) PEOLPIN, "Production and Injection"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1-	Group Key	GRP-SEQ00			To be coded as in APPENDIX IV
1-	Well code	WELL-CD	1	X(3)	To be coded as in APPENDIX IV
1-	Field code	FIELD-CD	4	9(3)	
2	Sequence number	SEQ-NO	7	X(1)	
3	Well identity	WELL-ID	8	9(1)	
2	String number	STRING-N0	9	9(2)	
3	Recompletion sequence notation	RECMPL-SEQ-NOTAT	9	9(2)	
2	String code	STRING-CD	11	9(1)	To be coded as in APPENDIX IV
3	Province code	PROVINCE-CD	12	9(1)	To be coded as in APPENDIX IV
4	Facilities field code	FFIELD-CD	13	X(2)	To be coded as in APPENDIX IV
5	Flag of production or injection	PROD-INJ-TG	15	9(1)	To be coded as in APPENDIX IV
					1. Production
					2. Injection

## (2) PEAOZNPR, "Monthly Production" (1/2)

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Date	[KEY]	1	X(6)	Ex. XXX.XX
2	Kind of completed zone	COMPL-ZN-KD	7	9(1)	To be coded as in APPENDIX IV
					1. Oil zone 2. Gas cap zone 3. Gas zone 4. Water zone
3	Well status	WELL-ST	8	X(3)	To be coded as in APPENDIX IV
4	Block station number	BS-NO	11	9(2)	
5	Choke size	CHOKE-SZ	13	9(3)	[mm]
6	Casing pressure	CASING-PRESS	16	9(3)	[kg/cm <sup>2</sup> ]
7	Tubing pressure	TUB-PRESS	19	9(3)	[kg/cm <sup>2</sup> ]
8	Separator pressure	SEP-PRESS	22	9(3)	[kg/cm <sup>2</sup> ]
9-	Monthly production rate	MONTH-PROD-RATE			
1-	Oil	MP-OIL	25	9(6)	[m <sup>3</sup> ]
2-	Gas	MP-XMP-GAS			See NOTE 1 in page AIII-144
1	High pressure gas	MP-XMP-GAS	31	9(6)V9(1)	[10 <sup>3</sup> m <sup>3</sup> ]
2	Medium pressure gas	MP-MED-GAS	38	9(6)V9(1)	[10 <sup>3</sup> m <sup>3</sup> ]
3	Low pressure gas	MP-LOP-GAS	45	9(6)V9(1)	[10 <sup>3</sup> m <sup>3</sup> ]
3	Water	MP-WAT	52	9(6)V9(1)	[m <sup>3</sup> ]
10	Production days	PROD-DAYS	59	9(2)	[day]
11	Monthly gas injection volume	MI-GAS-VOL	61	9(6)V9(1)	[10 <sup>3</sup> m <sup>3</sup> ]
12-	Cumulative production rate	CUM-PROD-RATE			
1-	Oil	CP-OIL	68	9(10)	[m <sup>3</sup> ]
2-	Gas	CP-GAS			See NOTE 1 in page AIII-144
1	High pressure gas	CP-XMP-GAS	78	9(10)V9(1)	[10 <sup>3</sup> m <sup>3</sup> ]
2	Medium pressure gas	CP-MED-GAS	89	9(10)V9(1)	[10 <sup>3</sup> m <sup>3</sup> ]

## (2) PEKOZMPR, "Monthly Production" (2/2)

Item No.	Item Name	Field Name	Position	Properties	Remarks
12-2-3	Low pressure gas	CP-LOP-GAS	100	9 (10)V9 (1)	[10³m³]
3	Water	CP-WAT	111	9 (10)	[m³]
4	Cumulative days	CP-DAYS	121	9 (5)	[day]

**NOTE 1.**

Definition of high, medium and low pressure gas by area are as follows:-

[Unit = Kg/cm<sup>2</sup>]

**Komplex Palembang Selatan**

**Komplex Palembang Tengah**

40  $\leq$  HP                  20  $\leq$  HP  
20  $\leq$  MP  $<$  40          10  $\leq$  MP  $<$  20  
0  $\leq$  LP  $<$  20                  0  $\leq$  LP  $<$  10

**Musai Klingkit**

**Jambali**

40  $\leq$  HP                  20  $\leq$  HP  
20  $\leq$  MP  $<$  40          10  $\leq$  MP  $<$  20  
0  $\leq$  LP  $<$  20                  0  $\leq$  LP  $<$  10

## (3) FENOZPR, "Zonally Production"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Reservoir unit code (KEY)	RESERV-CD	1	X(4)	To be coded as in APPENDIX IV
2	Type of reservoir content	RESERV-CONT-TY	5	9(1)	To be coded as in APPENDIX IV
					1. Paraffin oil reservoir
					2. Asphalt oil reservoir
					3. Gas reservoir
3	Kind of recovery method	RECOV-METHX-KD	6	9(1)	To be coded as in APPENDIX IV
					1. Primary recovery
					2. Secondary recovery
					3. Tertiary recovery
4	Share factor for production	SFACT-PROD	7	9(3)V9(2)	[8]
5	Layer code	LAYER-CD	12	X(3)*12	To be coded as in APPENDIX IV

## (4) PEA04MIJ, "Monthly Injection" (1/2)

Item No.	Item Name	Field Name [KEY]	Position Properties	Remarks
1	Date	DT	1 X(6) 7 9(1)	Ex. YYYY.MM To be coded as in APPENDIX IV
2	Kind of completed zone	COMPL-ZN-KD	1. Oil zone 2. Gas cap zone 3. Gas zone 4. Water zone	To be coded as in APPENDIX IV
3	Well status	WELL-ST	8 X(3)	
4	Block station number	BS-NO	11 9(2)	
5	Choke size	CHOKE-SZ	13 9(3)	[mm]
6	Well head pressure	WHEAD-PRESS	16 9(3)	[kg/cm <sup>2</sup> ]
7	Monthly injection rate	MI-RATE	19 9(6)V9(2)	[10 <sup>3</sup> m <sup>3</sup> ] in case of gas
8	Kind of injection fluid	IX-KD	27 9(1)	To be coded as in APPENDIX IV
9	Filtration	FILTRATION	28 9(1)	1. With filtration 2. Without filtration

## (S) PEAO4MIIJ, "Monthly Injection" (2/2)

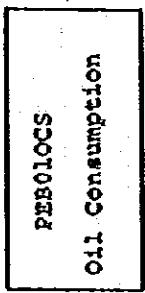
Item No.	Item Name	Field Name	Position	Properties	Remarks
10	Kind of additives	ADDITIVES-XD	29	9(1)	to be coded as in APPENDIX IV 1. Scale inhibitor 2. Demulsifier 3. Bactericide 4. Surfactant 5. Corrosion inhibitor 6. Others [day]
11	Injection days	INJECT-DAYS	30	9(2)	
	Cumulative injection	CUM-INJECT			
1	Rate of water	CI-WAT-RATE	32	9(10)	[m <sup>3</sup> ]
2	Rate of gas	CI-GAS-RATE	42	9(10)	V9(2) [10 <sup>3</sup> m <sup>3</sup> ]
3	Cumulative days	CI-DAYS	54	9(5)	[day]

## (5) PENOZIJ, "Zonally injection"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Reservoir unit code [KEY]	RESERV-CD	1	X(4)	To be coded as in APPENDIX IV
2	Type of reservoir content	RESERV-CONT-TX	5	9(1)	To be coded as in APPENDIX IV
					1. Paraffin oil reservoir
					2. Asphalt oil reservoir
					3. Gas reservoir
3	Kind of recovery method	RECOV-METH-KD	6	9(1)	To be coded as in APPENDIX IV
					1. Primary recovery
					2. Secondary recovery
					3. Tertiary recovery
					[%]
4	Share factor for injection	SPACT-INJECT	7	9(3)V9(2)	
5	Layer code	LAYER-CD	12	X(3)*12	To be coded as in APPENDIX IV

14-1 Segment Diagram of PEBOLCS, "Oil Consumption"

14 PEBOLCS, "Oil Consumption"



**14-2 Data Format of PEB0ILCS, "Oil Consumption"**

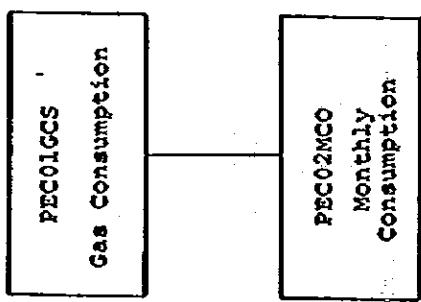
**(1) PEB0LOCS, "Oil Consumption"**

## (L) PEBOLCS, "Oil Consumption"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1-	Group key	GRP-SEQ00	1	9(2)	To be coded as in APPENDIX IV Ex. YYYY-MM
1-	Area code	AREA-CD	3	X(6)	
2-	Date	DT			
2-	Monthly oil consumption at 15°C	MOIL-CONSUMP			
1-	Refinery plateau	REFIN-PLAJU			
1-	Gross	RP-GROSS	9	9(7)	[m <sup>3</sup> ]
2	Water cut	RP-WATCUT	16	9(2)V9(2)	
3	Net	RP-NET	20	9(7)	
4	Specific gravity	RP-SPEC-GRAV	27	9(1)V9(4)	
2-	Field use	FIELD-USE			
1	Road maintenance	FU-ROAD-MENTE	32	9(7)	[m <sup>3</sup> ]
2	Well servicing	FU-WELL-SERV	39	9(7)	
3	Fuel	FU-FUEL	46	9(7)	
4	Other	FU-OTHER	53	9(7)	

15-1 Segment Diagram of PECGASCS, "Gas Consumption"

15 PECGASCS, "Gas Consumption"



**15-2 Data Format of PECGASCS, "Gas Consumption"**

- (1) PEC01GCS, "Gas Consumption"**
- (2) PEC02MCO, "Monthly Consumption"**

## (1) PECOLGCS, "Gas Consumption"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Group key	GRP-SEQ00			
1	Field code	FIELD-CD	1	X(3)	to be coded as in APPENDIX IV Ex. YYYY.MM
2	Date	DT	4	X(6)	
2	Area code	AREA-CD	10	9(2)	to be coded as in APPENDIX IV

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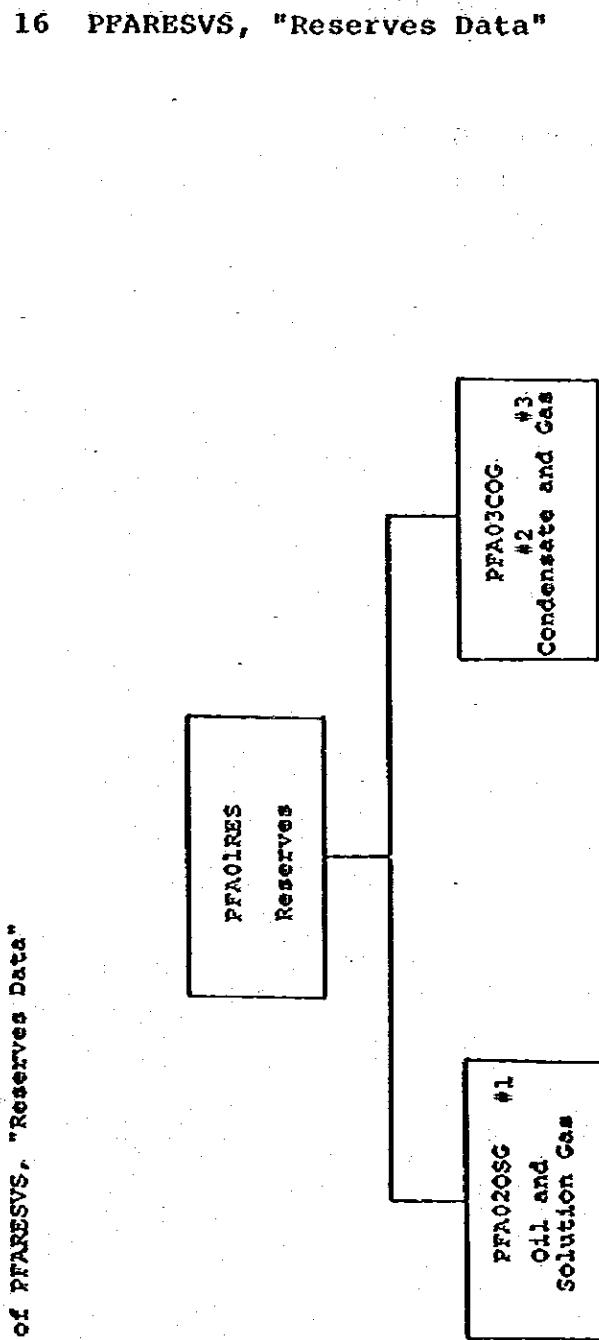
## (2) DECO2MCO, "Monthly Consumption"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Kind of gas consumption Gas consumption	[KEY] CONSUMP-KD GAS-CONSUMP	1	9(2)	To be coded as in APPENDIX IV See NOTE 1 in page AIII-156
2-	1 High pressure gas	GC-HIP-GAS	3	9(6)V9(2) [MMscf]	
2	2 Medium pressure gas	GC-MEP-GAS	11	9(6)V9(2) [MMscf]	
3	3 Low pressure gas	GC-LOP-GAS	19	9(6)V9(2) [MMscf]	

**NOTE 1. Kind of Gas Consumption**

01	Own use	Injection gas	From well
02	Gas light		From compressor
03			
04			
05	Process		
06	LNG plant		
07	Re-refined plant (Puri)		
08	Refinery		
09	S. Gerong		
10	Polypropylene		
11	Aromatic		
12	Sales	Electric company (PIN)	
13	City gas		
14	Others		
15	Flare and loss	Flare	
16			

16-1 Segment Diagram of PFARESVS, "Reserves Data"



#1: This segment applied to oil reservoir.

#2: Condensate means gas cap condensate in case of oil reservoir or nonassociated condensate in case of gas reservoir.

#3: Gas means gas cap in case of oil reservoir or nonassociated gas in case of gas reservoir.

**16-2 Data Format of PFARESVS, "Reserves Data"**

- (1) PFA01RES, "Reserves"**
- (2) PFA02OSG, "Oil and Solution Gas"**
- (3) PFA03COG, "Condensate and Gas"**

## (I) PETROLEUM, "Reserves"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1-1	Group key	GRP-SEQ00			
1-2	Field code	FIELD-CD	1	X(3)	To be coded as in APPENDIX IV
2-1	Reservoir unit code	RESERV-CD	4	X(4)	To be coded as in APPENDIX IV
2-2	Type of reservoir content	RESERV-CONT-TY	8	9(1)	To be coded as in APPENDIX IV
3	Formation code	FORMATION-CD	9	9(2)	To be coded as in APPENDIX IV
4-1	Abandonment condition	ABAN-COND			
4-2	High pressure	AC-HPRESS	11	9(2)	(XSC)
	Low pressure	AC-LPRESS	13	9(2)	(XSC)

## (2) PROGESS, "Oil and Solution Gas" (1/4)

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Date Development status of reservoir unit	[KEY] DT DEVELOP-ST	1 5	X(4) 9(1)	Ex. YYYY To be coded as in APPENDIX IV 1. Producing under primary recovery 2. Producing under secondary recovery 3. Producing under tertiary recovery 4. Nonproducing under primary recovery 5. Nonproducing under secondary recovery 6. Nonproducing under tertiary recovery 7. Undevelopment See NOTE 1 in page AIII-164
2					
3-	Initial oil in place				
4-	Oil reserves				
5-	Proven Probable Possible	INIT-OIL- PLACE TOP-PROV TOP-PROB TOP-POSS OIL-RESERVES OR-PROV	6 16 26	9(8)V9(2) 9(8)V9(2) 9(8)V9(2)	[103m <sup>3</sup> ] [103m <sup>3</sup> ] [103m <sup>3</sup> ]
6-	Proven Primary recovery Secondary recovery Tertiary recovery Probable	ORPV-PRECOV ORPV-SRECOV ORPV-TRECOV OR-PROB	36 45 54	9(7)V9(2) 9(7)V9(2) 9(7)V9(2)	[103m <sup>3</sup> ] [103m <sup>3</sup> ] [103m <sup>3</sup> ]
7-	Primary recovery Secondary recovery Tertiary recovery Probable	ORPB-PRECOV ORPB-SRECOV ORPB-TRECOV	63 72 81	9(7)V9(2) 9(7)V9(2) 9(7)V9(2)	[103m <sup>3</sup> ] [103m <sup>3</sup> ] [103m <sup>3</sup> ]

## (2) PROSPECT, "Oil and Solution Gas" (2/4)

Item No.	Item Name	Field Name	Position	Properties	Remarks
4-3-	Possible	OR-POSS			
1	Primary recovery	ORPS-PRECOV	90	9(7)V9(2)	[103m <sup>3</sup> ]
2	Secondary recovery	ORPS-SRECOP	99	9(7)V9(2)	[103m <sup>3</sup> ]
3	Tertiary recovery	ORPS-TRECOV	108	9(7)V9(2)	[103m <sup>3</sup> ]
5-	OIL production	OIL-PROD			
1	From primary recovery	OP-PRECOV	117	9(9)V9(1)	[m <sup>3</sup> ]
2	From secondary recovery	OP-SRECOP	127	9(9)V9(1)	[m <sup>3</sup> ]
3	From tertiary recovery	OP-TRECOV	137	9(9)V9(1)	[m <sup>3</sup> ]
6-	INIT-SOGAS-PLACE				
1	Proven	ISP-PROV	147	9(8)V9(2)	[106m <sup>3</sup> ]
2	Probable	ISP-PROB	157	9(8)V9(2)	[106m <sup>3</sup> ]
3	Possible	ISP-POSS	167	9(8)V9(2)	[106m <sup>3</sup> ]
7-	SOLUTION GAS RESERVES	GAS-RESERVES			
1-	Proven	GR-PROV	177	9(7)V9(2)	[106m <sup>3</sup> ]
1	Primary recovery	GRPV-PRECOV	186	9(7)V9(2)	[106m <sup>3</sup> ]
2	Secondary recovery	GRPV-SRECOP	186	9(7)V9(2)	[106m <sup>3</sup> ]
3	Tertiary recovery	GRPV-TRECOV	195	9(7)V9(2)	[106m <sup>3</sup> ]
2-	Probable	GR-PROB			
1	Primary recovery	GRPB-PRECOV	204	9(7)V9(2)	[106m <sup>3</sup> ]
2	Secondary recovery	GRPB-SRECOP	213	9(7)V9(2)	[106m <sup>3</sup> ]
3	Tertiary recovery	GRPB-TRECOV	222	9(7)V9(2)	[106m <sup>3</sup> ]
3-	Possible	GR-POSS			
1	Primary recovery	GRPS-PRECOV	231	9(7)V9(2)	[106m <sup>3</sup> ]
2	Secondary recovery	GRPS-SRECOP	240	9(7)V9(2)	[106m <sup>3</sup> ]
3	Tertiary recovery	GRPS-TRECOV	249	9(7)V9(2)	[106m <sup>3</sup> ]

## (2) PTNO2OSC, "Oil and Solution Gas" (3/4)

Item No.	Item Name	Field Name	Position	Properties	Remarks
8-	Solution gas production	GAS-PROD			
1	From primary recovery	GP-PRECOV	258	9 (9)V9 (1) [10 <sup>3</sup> m <sup>3</sup> ]	
2	From secondary recovery	GP-SRECOV	268	9 (9)V9 (1) [10 <sup>3</sup> m <sup>3</sup> ]	
3	From tertiary recovery	GP-TRECOV	278	9 (9)V9 (1) [10 <sup>3</sup> m <sup>3</sup> ]	
9-	Reservoir parameter for oil zone	RESPARA-OZ			
1-	Areal extent				
1	Proven	RPAE-PROV	288	9 (5)V9 (1) [ha]	
2	Probable	RPAE-PROB	294	9 (5)V9 (1) [ha]	
3	Possible	RPAE-POSS	300	9 (5)V9 (1) [ha]	
2-	Average effective thickness	AV-EFFTHICK			
1	Proven	AET-PROV	306	9 (3)V9 (1)	
2	Probable	AET-PROB	310	9 (3)V9 (1)	
3	Possible	AET-POSS	314	9 (3)V9 (1)	
3-	Net bulk rock volume	NBUL-ROCK-VOL			
1	Proven	NRY-PROV	318	9 (5)V9 (2) [10 <sup>6</sup> m <sup>3</sup> ]	
2	Probable	NRY-PROB	325	9 (5)V9 (2) [10 <sup>6</sup> m <sup>3</sup> ]	
3	Possible	NRY-POSS	332	9 (5)V9 (2) [10 <sup>6</sup> m <sup>3</sup> ]	
4-	Weighted average porosity	WT-AV-POROS			
1	Proven	WAF-PROV	339	V9 (3) [Fraction]	
2	Probable	WAF-PROB	342	V9 (3) [Fraction]	
3	Possible	WAF-POSS	345	V9 (3) [Fraction]	
5-	Weighted average water saturation	WT-WAT-SAT			
1	Proven	WAW-PROV	348	V9 (3) [Fraction]	
2	Probable	WAH-PROB	351	V9 (3) [Fraction]	
3	Possible	WAH-POSS	354	V9 (3) [Fraction]	

## (2) PTAOZOSC, "Oil and Solution Gas" (4/4)

Item No.	Item Name	Field Name	Position	Properties	Remarks
6-	Weighted average formation volume factor	WT-AV-FOR-VOL			
1	Proven	WT-PROV	357	9(1)V9(3) [m <sup>3</sup> /m <sup>3</sup> ]	
2	Probable	WT-PROB	361	9(1)V9(3) [m <sup>3</sup> /m <sup>3</sup> ]	
3	Possible	WT-POSS	365	9(1)V9(3) [m <sup>3</sup> /m <sup>3</sup> ]	
7-	Gravity	GRA-GRAVITY			
1	Oil	GRA-OIL	369	9(2)V9(2) [API]	
2	Gas	GRA-GAS	373	9(1)V9(3) [API-1]	
8-	Viscosity	VIS-VISCOSITY			
1	Oil	VIS-OIL	377	9(2)V9(2) [CP]	
2	Gas	VIS-GAS	381	9(1)V9(3) [CP]	
9-	Bubble point pressure	BUBO-PRESS	385	9(3)V9(1)	
10-	Weighted oil ratio	WT-OIL-RATE			
1	Proven	WOR-PROV	389	9(5) [m <sup>3</sup> /m <sup>3</sup> ]	
2	Probable	WOR-PROB	394	9(5) [m <sup>3</sup> /m <sup>3</sup> ]	
3	Possible	WOR-POSS	399	9(5) [m <sup>3</sup> /m <sup>3</sup> ]	
10-	Reference report	REP-REP			
1	Title	REP-TL	404	X(100) X(50)	
2	Date	REP-DT	554	X(8)	Ex. YYYY.MM.DD
3	Reference number	REP-REF-NO	562	X(20)	
4	Author	REP-AUTHOR	582	X(30)	
5	Organization of author	REP-AUTH-ORG	612	X(50)	
6	Map date	REP-MAP-DT	668	X(8)	Ex. YYYY.MM.DD

NOTE 1. Development Status of Reservoir Unit

- A. Developed
  - 1. Producing
    - a. Under primary recovery
    - b. Under secondary recovery
    - c. Under tertiary recovery
  - 2. Nonproducing
    - a. Under primary recovery
    - b. Under secondary recovery
    - c. Under tertiary recovery

B. Undeveloped

Reservoirs which have been produced fully or even partially can be classified as "developed". Reservoirs which have no producer or remain behind casing can be classified as "undeveloped". The undeveloped reservoirs can have the drilling unit on which wells have been drilled for no production purposes. Reservoir with no well such as just prospect will be excluded from even this undeveloped.

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Date	[KEY]	1 X(4)		Ex. YYYY To be coded as in APPENDIX IV
2	Development status of reservoir unit	DEVELOP-ST	5 9(1)		1. Producing under primary recovery 2. Producing under secondary recovery 3. Producing under tertiary recovery 4. Nonproducing under primary recovery 5. Nonproducing under secondary recovery 6. Nonproducing under tertiary recovery 7. Undevelopment
					See NOTE 1 in page AIII-169
3-	Initial condensate in place	INIT-CONDENS-PLACE			
1	Proven	ICP-PROV	6 9(8)V9(2)	[103m3]	
2	Probable	ICP-PROB	16 9(8)V9(2)	[103m3]	
3	Possible	ICP-POSS	26 9(8)V9(2)	[103m3]	
4-	Condensate reserves	CONDENS-RESERV	*2		Meaning of Index
					1. High pressure 2. Low pressure
1-	Proven	CR-PROV	36 9(7)V9(2)	[103m3]	
1	Primary recovery	CRPV-PROCOV	45 9(7)V9(2)	[103m3]	
2	Secondary recovery	CRPV-SRECOV	54 9(7)V9(2)	[103m3]	
3	Tertiary recovery	CRPV-TRECOV			
2-	Probable	CR-PROB			
1	Primary recovery	CRPB-PROCOV	63 9(7)V9(2)	[103m3]	
2	Secondary recovery	CRPB-SRECOV	72 9(7)V9(2)	[103m3]	
3	Tertiary recovery	CRPB-TRECOV	81 9(7)V9(2)	[103m3]	

## (3) PTA03COG, "Condensate and Gas" (2/4)

Item No.	Item Name	Field Name	Position	Properties	Remarks
4-3-	Possible	CR-POSS	90	9 (7) V9 (2)	[10 <sup>3</sup> m <sup>3</sup> ]
1	Primary recovery	CRPS-PRECOV	99	9 (7) V9 (2)	[10 <sup>3</sup> m <sup>3</sup> ]
2	Secondary recovery	CRPS-SRECOV	108	9 (7) V9 (2)	[10 <sup>3</sup> m <sup>3</sup> ]
3	Tertiary recovery	CRPS-TRECOV			[10 <sup>3</sup> m <sup>3</sup> ]
5-	Condensate production	CONDENS-PRODUCT			
1	From primary recovery	CP-PRECOV	198	9 (9) V9 (1)	[m <sup>3</sup> ]
2	From secondary recovery	CP-SRECOV	208	9 (9) V9 (1)	[m <sup>3</sup> ]
3	From tertiary recovery	CP-TRECOV	218	9 (9) V9 (1)	[m <sup>3</sup> ]
6-	Initial gas in place	INIT-GAS-PLACE			
1	Proven	ICGP-PROV	228	9 (8) V9 (2)	[10 <sup>6</sup> m <sup>3</sup> ]
2	Probable	ICGP-PROB	238	9 (8) V9 (2)	[10 <sup>6</sup> m <sup>3</sup> ]
3	Possible	ICGP-POSS	248	9 (8) V9 (2)	[10 <sup>6</sup> m <sup>3</sup> ]
7-	Gas reserves	GAS-RESERVES		*2	Meaning of index
					1. High pressure 2. Low pressure
1-	Proven	GR-PROV			
1	Primary recovery	GRPV-PRECOV	258	9 (7) V9 (2)	[10 <sup>6</sup> m <sup>3</sup> ]
2	Secondary recovery	GRPV-SRECOV	267	9 (7) V9 (2)	[10 <sup>6</sup> m <sup>3</sup> ]
3	Tertiary recovery	GRPV-TRECOV	276	9 (7) V9 (2)	[10 <sup>6</sup> m <sup>3</sup> ]
2-	Probable	GR-PROB			
1	Primary recovery	GRPB-PRECOV	285	9 (7) V9 (2)	[10 <sup>6</sup> m <sup>3</sup> ]
2	Secondary recovery	GRPB-SRECOV	294	9 (7) V9 (2)	[10 <sup>6</sup> m <sup>3</sup> ]
3	Tertiary recovery	GRPB-TRECOV	303	9 (7) V9 (2)	[10 <sup>6</sup> m <sup>3</sup> ]
3-	Possible	GR-POSS			
1	Primary recovery	GRPS-PRECOV	312	9 (7) V9 (2)	[10 <sup>6</sup> m <sup>3</sup> ]
2	Secondary recovery	GRPS-SRECOV	321	9 (7) V9 (2)	[10 <sup>6</sup> m <sup>3</sup> ]
3	Tertiary recovery	GRPS-TRECOV	330	9 (7) V9 (2)	[10 <sup>6</sup> m <sup>3</sup> ]

## (3) PPAOJCOG, "Condensate and Gas" (3/4)

Item No.	Item Name	Field Name	Position	Properties	Remarks
8-	Gas production	GAS-PROD			
1	From primary recovery	GP-PRECOV	420	9(9)V9(1) [10 <sup>3</sup> m <sup>3</sup> ]	
2	From secondary recovery	GP-SRECOV	430	9(9)V9(1) [10 <sup>3</sup> m <sup>3</sup> ]	
3	From tertiary recovery	GP-TRECOV	440	9(9)V9(1) [10 <sup>3</sup> m <sup>3</sup> ]	
9-	Gas injection	GAS-INJECT			
1	To primary recovery	GI-PRECOV	450	9(9)V9(1) [10 <sup>3</sup> m <sup>3</sup> ]	
2	To secondary recovery	GI-SRECOV	460	9(9)V9(1) [10 <sup>3</sup> m <sup>3</sup> ]	
3	To tertiary recovery	GI-TRECOV	470	9(9)V9(1) [10 <sup>3</sup> m <sup>3</sup> ]	
10-	Reservoir parameter for gas cap zone or gas reservoir areal extent	RESARA-GCZ-GR AREAL-EXT			
1-	Proven	RPAE-PROV	480	9(5)V9(1) [ha]	
2	Probable	RPAE-PROB	486	9(5)V9(1) [ha]	
3	Possible	RPAE-POSS	492	9(5)V9(1) [ha]	
2-	Average effective thickness	AV-EFFECTICK			
1-	Proven	AET-PROV	498	9(3)V9(1)	
2	Probable	AET-PROB	502	9(3)V9(1)	
3	Possible	AET-POSS	506	9(3)V9(1)	
3-	Net bulk rock volume	NBUL-ROCK-VOL			
1-	Proven	NRV-PROV	510	9(5)V9(1) [10 <sup>6</sup> m <sup>3</sup> ]	
2	Probable	NRV-PROB	516	9(5)V9(1) [10 <sup>6</sup> m <sup>3</sup> ]	
3	Possible	NRV-POSS	522	9(5)V9(1) [10 <sup>6</sup> m <sup>3</sup> ]	
4-	Weighted average porosity	WT-AV-POROS			
1	Proven	WAP-PROV	528	V9(3) [fraction]	
2	Probable	WAP-PROB	531	V9(3) [fraction]	
3	Possible	WAP-POSS	534	V9(3) [fraction]	

## (3) PTA03COC, "Condensate and Gas" (4/4)

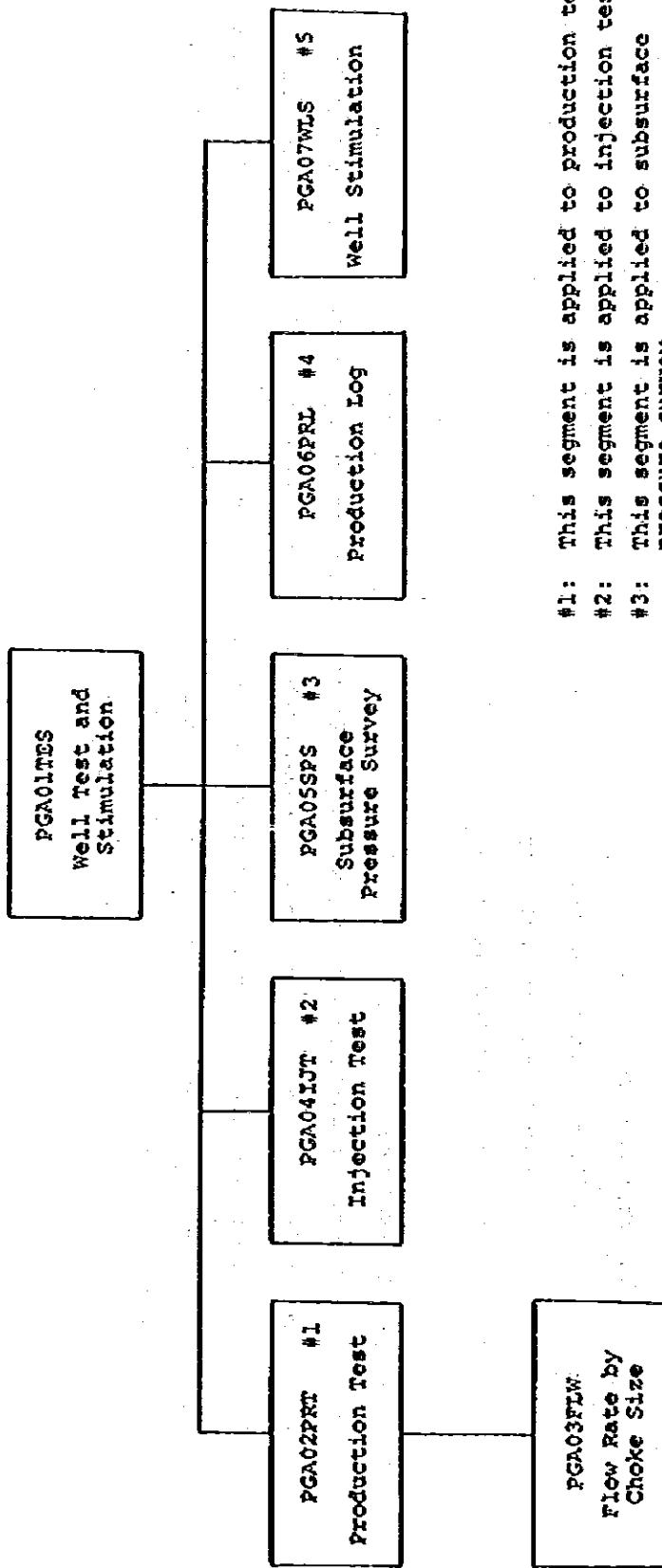
Item No.	Item Name	Field Name	Position	Properties	Remarks
10-5-	Weighted average water saturation	WT-AV-WATSAT			
1	Proven	WAW-PROV	537	V9(3)	[m <sup>3</sup> /m <sup>3</sup> ]
2	Probable	WAW-PROB	540	V9(3)	[m <sup>3</sup> /m <sup>3</sup> ]
3	Possible	WAW-POSS	543	V9(3)	[m <sup>3</sup> /m <sup>3</sup> ]
6-	Weighted average gas oil ratio	WT-AV-GO-RAT			
1	Proven	WAG-PROV	546	9(6)	[m <sup>3</sup> /m <sup>3</sup> ]
2	Probable	WAG-PROB	552	9(6)	[m <sup>3</sup> /m <sup>3</sup> ]
3	Possible	WAG-POSS	558	9(6)	[m <sup>3</sup> /m <sup>3</sup> ]
7-	Expansion factor	EXP-A-FACT			
1	Initial	EF-INIT	564	9(4)V9(2)	[m <sup>3</sup> /m <sup>3</sup> ]
2	Abandon condition (High pressure)	EFI-ABCON-HPRESS	570	9(4)V9(2)	[m <sup>3</sup> /m <sup>3</sup> ]
3	Abandon condition (Low pressure)	EFI-ABCON-LPRESS	576	9(4)V9(2)	[m <sup>3</sup> /m <sup>3</sup> ]
8	Fractional gas	FRACT-GAS	582	V9(4)	
11-	Reference report title	REF-REP-TITLE	586	X(100) X(50)	
1	Date	REP-DT	736	X(8)	
2	Reference number	REP-REF-NO	744	X(20)	
3	Author	REP-AUTHOR	764	X(30)	
4	Organization of author	REP-AUTH-ORG	794	X(50)	
5	Map date	REP-MAP-DT	844	X(8)	Ex. YYYY.MM.DD

**NOTE 1. Development Status of Reservoir Unit**

- A. Developed
  - 1. Producing
    - a. Under primary recovery
    - b. Under secondary recovery
    - c. Under tertiary recovery
  - 2. Nonproducing
    - a. Under primary recovery
    - b. Under secondary recovery
    - c. Under tertiary recovery
- B. Undeveloped
  - Reservoirs which have been produced fully or even partially can be classified as "developed".  
Reservoirs which have no producer or remain behind casing can be classified as "undeveloped".  
The undeveloped reservoirs can have the drilling unit on which wells have been drilled for no production purposes. Reservoir with no well such as just prospect will be excluded from even this undeveloped.

17-1 Segment Diagram of PGAWELTS, "Well Test and Stimulation"

17 PGAWELTS, "Well Test and Stimulation"



- #1: This segment is applied to production test.
- #2: This segment is applied to injection test.
- #3: This segment is applied to subsurface pressure survey.
- #4: This segment is applied to production log.
- #5: This segment is applied to well stimulation.

**17-2 Data Format of PGAWELTS, "Well Test and Stimulation"**

- (1) PGA01TES, "Well Test and Stimulation"**
- (2) PGA02PRT, "Production Test"**
- (3) PGA03FLW, "Flow Rate by Choke Size"**
- (4) PGA04IJT, "Injection Test"**
- (5) PGA05SPS, "Subsurface Pressure Survey"**
- (6) PGA06PRL, "Production Log"**
- (7) PGA07WLS, "Well Stimulation"**

## (1) PG001ES, "Well Test and Stimulation"

Item No.	Item Name	Field Name	Properties	Position	Remarks
1	Well test and stimulation code [ICXY]	WELL-TEST-STIM-CD WELL-CD	1 8	X(7) 9(1)	To be coded as in APPENDIX IV To be coded as in APPENDIX IV To be coded as in APPENDIX IV 1. Production test 2. Injection test 3. Subsurface pressure survey 4. Production log 5. Well stimulation
2	Kind of well test and stimulation	WTST-STIM-CD			
3	Sequence number	SEQ-NO	9	9(2)	
4	Date	DT	11	X(2)	Ex. YY
5	Province code	PROVINCE-CD	13	9(1)	To be coded as in APPENDIX IV
6	Area code	AREA-CD	14	9(2)	To be coded as in APPENDIX IV
7	Field office code	FDOFFICE-CD	16	9(1)	To be coded as in APPENDIX IV
8	Worker number	WKOV--NO	17	9(2)	To be coded as in APPENDIX IV
9	String code	STRING-CD	19	9(1)	To be coded as in APPENDIX IV
10	Kind of completed zone	COMPL-2N-XD	20	9(1)	To be coded as in APPENDIX IV
11	Well status	WELL-ST	21	X(3)	1. Oil zone 2. Gas cap zone 3. Gas zone 4. Water zone
12	Formation code	FORMATION-CD	24	9(2)	To be coded as in APPENDIX IV
13	Reservoir unit code	RESERV-CD	26	X(4)*10	To be coded as in APPENDIX IV
14	Layer code	LAYER-CD	66	X(3)*20	To be coded as in APPENDIX IV
15	Test or stimulation period	TEST-STIM-PD	126	X(8)*2	Ex. YYYY.MM.DD--YYYY.MM.DD
16	Surveyor or service contractor	SURV-SERV-CONTRACTOR	142	X(30)	

## (2) PG102PRT, "Production Test" (1/3)

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Kind of production test	PROD-TEST-KD	1	9(1)	To be coded as in APPENDIX IV 1. Initial production test before stimulation 2. Initial production test after stimulation 3. Production test before workover 4. Production test after workover 5. Production test before stimulation test 6. Production test after stimulation test 7. Production test
2	Type of production test	PROD-TEST-TY	2	9(1)	To be coded as in APPENDIX IV 1. Flow test for oil 2. Multipoint test for gas 3. Isochronal test for gas 4. Pulse test 5. Other
3	Bottomhole pressure survey	BHOLE-PSURVEY	3	9(1)	To be coded as in APPENDIX IV 1. With bottomhole sampling 2. Without bottomhole sampling [m]
4	Test interval	TEST-IV	4	9(4)V9(1) *2	
5-	Test record	TEST-REC	5	9(1)	To be coded as in APPENDIX IV
1	Bottomhole sampling	TR-BHOLE-SAMPL	1	9(1)	1. With bottomhole sampling 2. Without bottomhole sampling [kg/cm <sup>2</sup> ]
2	Bottomhole shut-in pressure (Max.)	BHOLE-SIN-PRESS	2	9(3)V9(1)	
3	Bottomhole flowing pressure	BHOLE-FLO-PRESS	3	9(3)V9(1)	[kg/cm <sup>2</sup> ]

## (2) PGNO2PRT, "Production Test" (2/3)

Item No.	Item Name	Field Name	Position	Properties	Remarks
5-4	Average pressure gradient in tubing	AV-GRAD-TUBE	23	9(1)V9(3)	[kg/cm <sup>2</sup> /10m]
5	Bottomhole temperature	BOHOLE-TEMP	27	9(3)V9(2)	[°C]
6-	Fluid analysis (surface sampling fluid)	FLUID-ANAL			
1	API oil gravity	API-OIL-GRAV	32	9(2)V9(2)	[°API]
2	API pour point	API-POUR-PT	36	9(2)V9(2)	[°C]
3	Water salinity	WAT-SALIN	40	9(6)	[ppm]
4	Gas gravity	GAS-GRAV	46	9(1)V9(2)	[Air=1]
5-	Gas main component	GAS-MCOMP			
1	H2S	GMC-H2S	49	9(2)V9(2)	[% vol]
2	CO2	GMC-CO2	53	9(2)V9(2)	[% vol]
3	O2	GMC-O2	57	9(2)V9(2)	[% vol]
4	N2	GMC-N2	61	9(2)V9(2)	[% vol]
5	C1	GMC-C1	65	9(2)V9(2)	[% vol]
6	C2	GMC-C2	69	9(2)V9(2)	[% vol]
7	C3	GMC-C3	73	9(2)V9(2)	[% vol]
8	C4	GMC-C4	77	9(2)V9(2)	[% vol]
9	C5+	GMC-C5P	81	9(2)V9(2)	[% vol]
10	Other components	GMC-OTH-COMP	85	9(2)V9(2)	[% vol]
7-	Test analysis result	TEST-ANAL-RESULT			
1	P*	TAR-PAST	89	9(3)V9(2)	[kg/cm <sup>2</sup> ]
2	Flow capacity (Xh)	TAR-FCAPAC	94	9(6)V9(2)	[millidarcy*m] (millidarcy)
3	Permeability (K)	TAR-PERM	102	9(4)V9(2)	
4	Skin factor (S)	TAR-SFACT	108	9(3)V9(2)	
5	Damage ratio (DR)	TAR-DAM-RAT	113	9(2)V9(2)	[%]

## (2) PGAO2PRT, "Production Test" (3/3)

Item No.	Item Name	Field Name	Position	Properties	Remarks
7-6-	Productivity index (PI) ideal	TRA-PRODTV-IX TRAPI-IDEAL	117 9(3)V9(2)	See NOTE 1 in page AIII-176 in case of oil [m <sup>3</sup> /d/kg/cm <sup>2</sup> ] in case of gas [10 <sup>3</sup> m <sup>2</sup> /d/kg/cm <sup>2</sup> ]	
2	Actual	TRAPI-ACTUAL	122 9(3)V9(2)	in case of oil [m <sup>3</sup> /d/kg/cm <sup>2</sup> ] in case of gas [10 <sup>3</sup> m <sup>2</sup> /d/kg/cm <sup>2</sup> ]	
7	Flow efficiency	TRA-TEFFIC	127 9(1)V9(3)	[Fraction]	
8	Q max	TRA-QMAX	131 9(5)V9(1)	[m <sup>3</sup> /d]	
9	Absolute open flow potential	TRA-FPTENT	137 9(5)V9(1)	[10m <sup>3</sup> /d]	
8-	Reference report	REF-REP			
1-	Flow test report	FTEST-REP	143 X(150)		
1	Title	FTTR-TL	293 X(8)	Ex. YYYY.MM.DD	
2	Date	FTTR-DT	301 X(20)		
3	Reference no.	FTTR-REF-NO	321 X(30)		
4	Author	FTTR-AUTHOR	351 X(50)		
5	Organization of author	FTTR-AUTH-ORG			
2-	Fluid analysis report	FLUID-ANAL-REP			
1	Title	FTAR-TL	401 X(150)		
2	Date	FTAR-DT	551 X(8)	Ex. YYYY.MM.DD	
3	Reference no.	FTAR-REF-NO	559 X(20)		
4	Author	FTAR-AUTHOR	579 X(30)		
5	Organization of author	FTAR-AUTH-ORG	609 X(50)		
3-	Flow test analysis report	FTEST-ANAL-REP			
1	Title	FTAR-TL	659 X(150)		
2	Date	FTAR-DT	809 X(8)	Ex. YYYY.MM.DD	
3	Reference no.	FTAR-REF-NO	817 X(20)		
4	Author	FTAR-AUTHOR	837 X(30)		
5	Organization of author	FTAR-AUTH-ORG	867 X(50)		

NOTE 1.

Kind of completed zone (in root segment)	Ideal	Actual
"1" (Oil zone)	Oil	Oil
"2" (Gas cap zone)		Gas
"3" (Gas zone)		Gas

## (3) PGN03FLW, "Flow Rate by Choke Size"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1-	Group key Flowing method for test	GRP-SEG00- TMETH-TEST	1	9(1)	To be coded as in APPENDIX IV
2-	Choke size	CHOKE-SZ	2	9(3)	
2-	Flow rate	FR-RATE	5	9(4)V9(1) [m <sup>3</sup> /d]	
2-	Oil	FR-OIL	10	9(4)V9(1) [10 <sup>3</sup> m <sup>3</sup> /d]	
2-	Gas	FR-GAS	15	9(4)V9(1) [10 <sup>3</sup> m <sup>3</sup> /d]	
2-	High pressure gas	FRG-HIP-GAS	20	9(4)V9(1) [10 <sup>3</sup> m <sup>3</sup> /d]	
2-	Medium pressure gas	FRG-MEP-GAS	25	9(2)V9(2) [%]	
2-	Low pressure gas	FRG-LOP-GAS	29	9(3)V9(1) [kg/cm <sup>2</sup> ]	
3-	Water cut	FR-WATCUT	33	9(3)V9(1) [kg/cm <sup>2</sup> ]	
3-	Tubing pressure	TUB-PRESS	37	9(3)V9(1) [kg/cm <sup>2</sup> ]	
4-	Casing pressure	CASING-PRESS	41	9(3)V9(1) [kg/cm <sup>2</sup> ]	
5-	Flow line pressure	FLINE-PRESS	45	9(3)V9(1) [kg/cm <sup>2</sup> ]	
6-	Separator pressure	SUP-PRESS	49	9(3)V9(1) [kg/cm <sup>2</sup> ]	
1	High pressure	SP-HPRESS	53	9(4)V9(1) [kg/cm <sup>2</sup> ]	
2	Medium pressure	SP-MPRESS	53	9(4)V9(1) [kg/cm <sup>2</sup> ]	
3	Low pressure	SP-LPRESS	53	9(4)V9(1) [kg/cm <sup>2</sup> ]	
7	Gas lift gas	GAS-LFT-GAS			[10 <sup>3</sup> m <sup>3</sup> /d]

## (4) PGN04IJT, "Injection Test" (1/3)

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Kind of injection test	INJECT-TEST-XD	1	9(1)	to be coded as in APPENDIX IV 1. Initial injection test before stimulation 2. Initial injection test after stimulation 3. Injection test before workover 4. Injection test after workover 5. Injection test before stimulation 6. Injection test after stimulation 7. Injection test
2	Type of injection test	INJECT-TEST-TY	2	9(1)	to be coded as in APPENDIX IV 1. Fall off test 2. Step rate test
3	Bottomhole pressure survey	BOHOLE-PSURVEY	3	9(1)	to be coded as in APPENDIX IV 1. With bottomhole pressure survey 2. Without bottomhole pressure survey
4	Test interval	TEST-IV	4	9(4)v9(1) <sub>2</sub>	[m]
5	Kind of injection fluid	INJECT-FLUID-XD	14	9(1)	to be coded as in APPENDIX IV 1. Fresh water 2. Seawater 3. Formation water 4. Wet gas 5. Dry gas 6. CO <sub>2</sub> 7. Air 8. Other kind of water

## (4) PGAO4IJT, "Injection Test" (2/3)

Item No.	Item Name	Field Name	Position	Properties	Remarks
6-	Treatment for injection fluid	TREAT-INJECT-FLUID			
1	Filtration	FILTRATION	15	9(1)	To be coded as in APPENDIX IV 1. With filtration 2. Without filtration
2	Kind of additives	ADDITIVES-XD	16	9(1)	To be coded as in APPENDIX IV 1. Scale inhibitor 2. Demulsifier 3. Bactericide 4. Surfactance 5. Corrosion inhibitor 6. Others
7-	Test record				
1	Cumulative injection volume	TR-CUMINJ-VOL	17	9(6)V9(1)	In case of water [ $m^3$ ] In case of gas [ $10^3 m^3$ ]
2	Average daily injection rate	TE-AVDLY-INJRT	24	9(4)V9(1)	In case of water [ $m^3$ ] In case of gas [ $10^3 m^3$ ]
3	Maximum wellhead flowing pressure	TR-MAXWL-PRESS	29	9(3)V9(1)	[kg/cm <sup>2</sup> ]
4	Maximum bottomhole flowing pressure	TR-MAXBHOLE-PRESS	33	9(4)V9(1)	[kg/cm <sup>2</sup> ]
5	Bottomhole flowing pressure at stabilized condition	TR-BHOLE-STABCOND	38	9(4)V9(1)	[kg/cm <sup>2</sup> ]
6	Bottomhole temperature	TR-BHOLE-TMP	43	9(3)V9(2)	[°C]
8-	Test results	TEST-RESULT			
1	P*	TR-PSAT	48	9(3)V9(2)	[kg/cm <sup>2</sup> ]
2	Flow capacity (Ka)	TR-PCAPAC	53	9(6)V9(2)	[millidarcy* m]
3	Permeability (K)	TR-PERM	61	9(4)V9(2)	[millidarcy]
4	Skin factor (S)	TR-SFACT	67	9(3)V9(2)	
5	Damage ratio (DR)	TR-DAM-RAT	72	9(2)V9(2)	[s]

## (4) PGAO4IJT, "Injection test" (3/3)

Item No.	Item Name	Field Name	Position	Properties	Remarks
8-6-	Injectivity index (II)	TRE-INJECT-IDX	76	9 (3)V9 (2)	See NOTE 1 in page AIII-181
1	Ideal	TREII-IDEAL			In case of water [ $m^3/d/kg/cm^2$ ]
2	Actual	TREII-ACTUAL	81	9 (3)V9 (2)	In case of gas [ $10^3m^3/d/kg/cm^2$ ]
7	Flow efficiency	TRE-FEETIC	86	9 (1)V9 (3)	In case of water [ $m^3/d/kg/cm^2$ ]
9-	Reference report	REF-REP			In case of gas [ $10^3m^3/d/kg/cm^2$ ]
1-	Injection test report	INJECT-REP			[Fraction]
1-	title	ITR-TL	90	X(150)	
2	Date	ITR-DT	240	X(8)	Ex. YYYY.MM.DD
3	Reference No.	ITR-REF-NO	248	X(20)	
4	Author	ITR-AUTHOR	268	X(30)	
5	Organization of author	ITR-AUTH-ORG	298	X(50)	
2-	Injection test analysis report	ITA-REP			
1	title	ITA-TL	348	X(150)	
2	Date	ITA-DT	498	X(8)	Ex. YYYY.MM.DD
3	Reference No.	ITA-REF-NO	506	X(20)	
4	Author	ITA-AUTHOR	526	X(30)	
5	Organization of author	ITA-AUTH-ORG	556	X(50)	
3-	Injection fluid treatment report	ITF-REP			
1	Title	ITF-TL	606	X(150)	
2	Date	ITF-DT	756	X(8)	Ex. YYYY.MM.DD
3	Reference No.	ITF-REF-NO	764	X(20)	
4	Author	ITF-AUTHOR	784	X(30)	
5	Organization of author	ITF-AUTH-ORG	814	X(50)	

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**NOTE 1.**

Kind of completed zone (in root segment)	Actual	
	Ideal	Actual
"1" (Oil zone)	Water	Water
"2" (Gas cap zone)	Gas	Gas
"3" (Gas zone)		

## (S) PCASSPS, "Subsurface Pressure Survey" (1/2)

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Type of survey	SURVEY-TY	1	9(1)	To be coded as in APPENDIX IV
2-					1. Build-up pressure survey 2. Fall-off pressure survey 3. Spot measurement
2-	Survey depth	SURVEY-DP	2	9(4)V9(1)	[m]
1	BDF	SD-BDF	2	9(4)V9(1)	[m]
2	Subsea depth	SD-SUBSEA	7	9(4)V9(1)	[m]
3	Datum plane depth	DAT-PL-DP	12	9(4)V9(1)	[m]
4-	Test record	TEST-REC			
4-	Shut-in time	TR-SIN-TIME	17	9(5)V9(1)	[hr]
2	Bottomhole pressure	TR-BHOLE-PRESS	23	9(4)V9(1)	[kg/cm <sup>2</sup> /10m] Final point in case of build-up survey
3	Liquid level in subsea depth	TR-IOLV-SSDP	28	9(4)V9(1)	[m]
4	Average pressure gradient for gas column	TR-APG-GAS	33	9(1)V9(3)	[kg/cm <sup>2</sup> /10m]
5	Average pressure gradient for liquid column	TR-APG-LQD	37	9(1)V9(2)	[kg/cm <sup>2</sup> /10m]
6	Wellhead pressure	TR-WHEAD-PRESS	40	9(3)V9(1)	[kg/cm <sup>2</sup> ]
5-	Test analysis result	TEST-ANAL-RESULT			
5-	Pw	TR-PAST	44	9(4)V9(2)	[kg/cm <sup>2</sup> ]
1	Flow capacity (Xh)	TR-EFCAPAC	50	9(6)V9(2)	[Millidarcy*m]
2	Permeability (K)	TR-PERMS	58	9(4)V9(2)	[Millidarcy]
3	Skin factor (S)	TR-E-SFACT	64	9(3)V9(2)	
4	Damage ratio (DR)	TR-E-DAM-RAT	69	9(2)V9(2)	[Fraction]
5	Productivity index	TR-E-PRODTV-IX			
6-	Ideal	TRPI-IDEAL	73	9(3)V9(2)	See NOTE 1 in page AIII-184 In case of oil [m <sup>3</sup> /d/kg/cm <sup>2</sup> ] In case of gas [10 <sup>3</sup> m <sup>3</sup> /d/kg/cm <sup>2</sup> ]
1	Actual	TRPI-ACTUAL	7R	9(3)V9(2)	In case of oil [m <sup>3</sup> /d/kg/cm <sup>2</sup> ] In case of gas [10 <sup>3</sup> m <sup>3</sup> /d/kg/cm <sup>2</sup> ]
2					

## (S) PGASSPS, "Subsurface Pressure Survey" (2/2)

Item No.	Item Name	Field Name	Position	Properties	Remarks
5-7	Flow efficiency	TRE-QEFFIC	83	9(1)V9(3)	[traction]
8	Q max	TRE-QMAX	87	9(5)V9(1)	[m <sup>3</sup> /d]
9	Absolute open flow potential in case of gas	TRE-APTPG	93	9(5)V9(1)	[m <sup>3</sup> /d]
6-	Pressure element Date of last calibration	PRESS-ELEM	99	X(8)	
1		PB-LCALIB-DT			
2	Pressure element number	PRESS-ELEM-NO	107	X(5)	
3	Type of pressure element	PRESS-ELEM-TY	112	X(7)	

NOTE 1.

Kind of completed zone (in root segment)	Ideal	Actual
"1" (Oil zone)	Oil	Oil
"2" (Gas cap zone)		Gas
"3" (Gas zone)		Gas

## (6) PGM06PRL, "Production Log"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Run number	RUN-NO	1	X(2)	
2	Log identification number	LOG-IDNO	3	X(10)	
3	Kind of production log	PROD-LOG-KD	13	9(1)*5	To be coded as in APPENDIX IV
					1. Inflatable combination tool (ICR) 2. Production combination tool (PCR) 3. Packer flowmeter 4. Continuous flowmeter 5. Full bore spinner flowmeter 6. Gradicmanometer
4	Test interval	TEST-IV	18	9(4)V9(2)	[m]
5	Reference report	REF-REP	1		
	Title	REP-TL	30	X(100)	
	Date	REP-DT	180	X(8)	
	Reference No.	REP-REF-NO	188	X(20)	EX. YYYY.MM.DD
4	Author	REP-AUTHOR	208	X(30)	
5	Organization of author	REP-AUTH-ORG	238	X(50)	

## (7) PGM07WIS, "Well Stimulation"

Item No.	Item Name	Field Name	Position	Properties	Remarks
1	Objective for stimulation	STIM-OBJ	1	9(1)	To be coded as in APPENDIX IV 1. Production stimulation 2. Injection stimulation
2	Type of stimulation	STIM-TY	2	9(1)	To be coded as in APPENDIX IV 1. Matrix acidizing 2. Fracture acidizing 3. Hydraulic fracturing
3	Treatment interval	TREAT-IV	3	9(4)V9(1) *2	
4-	Treatment fluid				
1	Type	TREAT-FLUID	13	X(15)	
2	Main additives	TREAT-MAIN-ADD	28	X(30)	
3	Volume	TREAT-VOL	58	9(3)V9(2)	[m <sup>3</sup> ]
5-	Summary of treatment	TREAT-SUM	63	X(20)	
6-	Well stimulation report				
1	Title	WELL-STIM-REP	83	X(150)	
2	Date	WELL-DT	233	X(8)	Ex. YYYY.MM.DD
3	Reference No.	WELL-REF-NO	241	X(20)	
4-	Author	WELL-AUTHOR	261	X(30)	
5-	Organization of author	WELL-AUTH-ORG	291	X(50)	
6-	Production test code	PROD-TEST-CD			To be coded as in APPENDIX IV last 4 digit
1	Before	PTC-BEFORE	341	X(4)	
2	After	PTC-AFTER	345	X(4)	