

EAST MERKENIE NO. 24
WELL COMPLETION REPORT
PETROLEUM LEASE NO. 5, NORTHERN TERRITORY
BY
MOONIE OIL N.L.
MARCH 1986

NORTHERN TERRITORY
GEOLOGICAL SURVEY.

Res 6/11 B

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S U M M A R Y

SUMMARY

East Mereenie No. 24 is the twenty-fifth well in the current Mereenie Field Appraisal and Development Programme. The well was located for optimum oil production from the Pl-80 reservoir, which flowed oil in East Mereenie No.'s 6 and 8. It is located 3002 ft on a true bearing of 308° from East Mereenie No. 6, and 3576 ft on a true bearing of 132° from East Mereenie No. 8.

East Mereenie No. 24 is an eastern nose appraisal well.

The well spudded into the Parke Siltstone on the 10th of October, 1985, using the O.D. & E. Rig No. 19, and reached total depth at 4848 ft, 23 days later, on the 2nd of November 1985, in the Pacoota P1 sub-unit.

The well was drilled to 2963 ft with air and foam. 8-5/8" casing was set at 2960 ft and drilling continued, using air, in 7-7/8" hole to 4426 ft. An open hole flow test was conducted at 4426 ft in the Lower Stairway Sandstone, with the well flowing at 1.7 Mmcf/D. Drilling continued to 4446 ft. At 4440 ft drilling was temporarily stopped due to a down hole fire. The hole was displaced with 10.5 ppg oil based mud at 4446 ft. Drilling continued in 7-7/8" hole to total depth.

Three Drill Stem Tests were run. DST No. 1 (4378-4446 ft) and DST No. 2 (4298-4446 ft) attempted to test the Lower Stairway LS-160 sand. Both tests failed owing to packer seat failure caused by badly caved hole. DST No. 3 (4760-4788 ft) tested the Pl-80 sand unit. The interval flowed 48.9 API oil at the rate of 500 BOPD and gas at the rate of 333 Mcfd. The gas oil ratio was 668 cu ft/bbl.

A suite of wireline logs was run at total depth 4848 ft. Log analysis failed to indicate the gas-oil or oil-water contacts.

No cores were cut in this well.

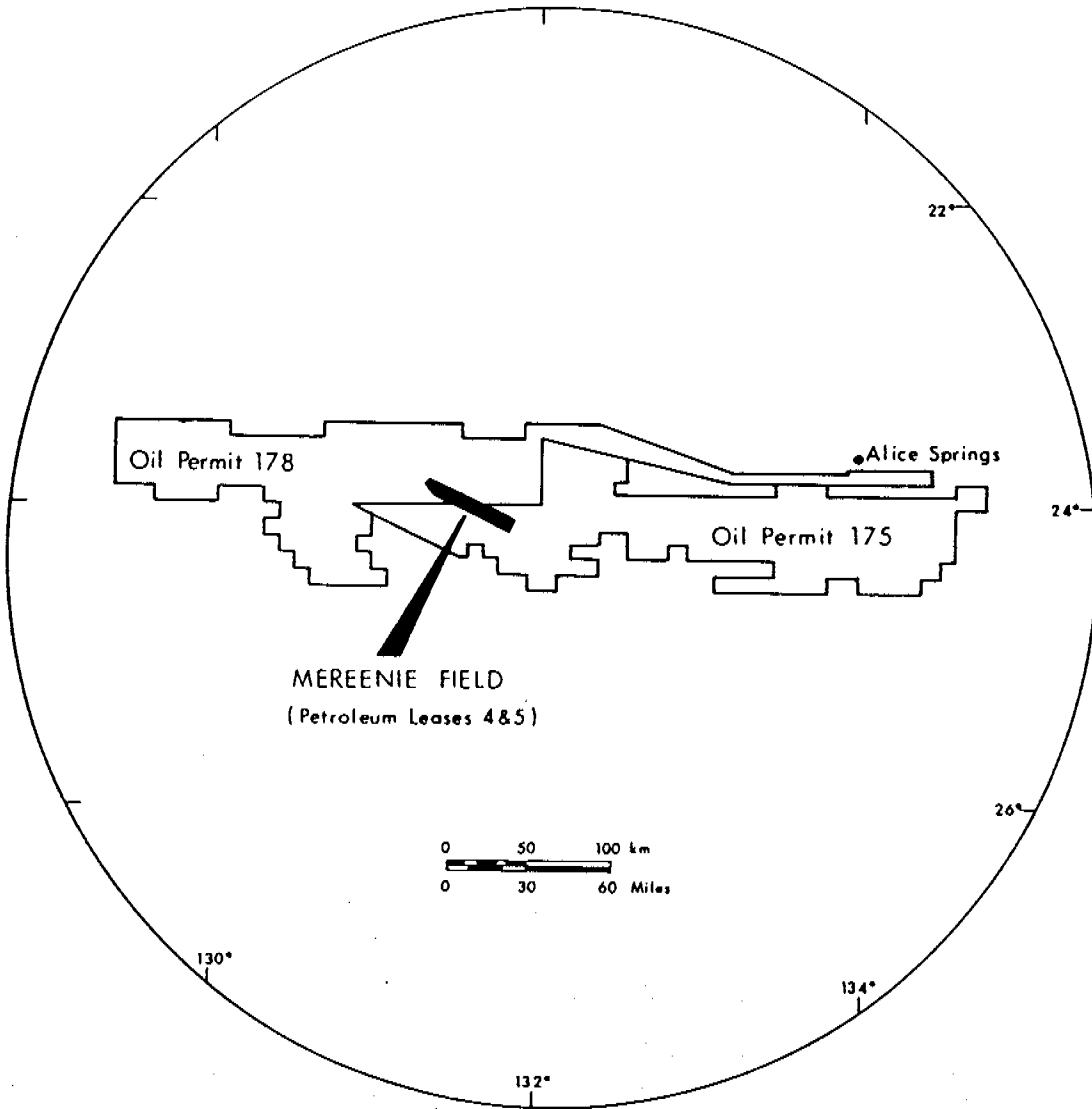
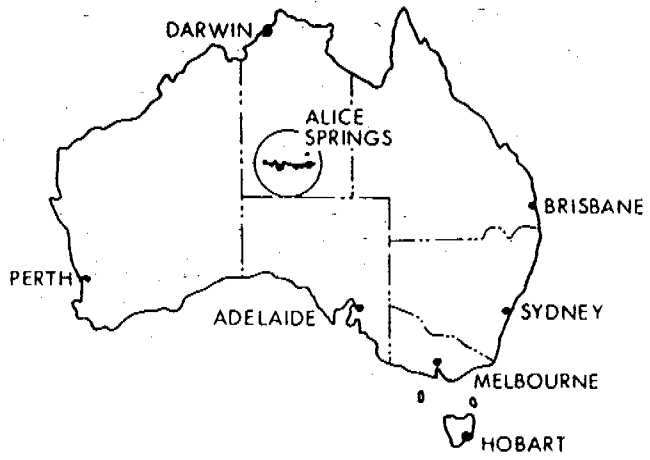
At total depth, 5-1/2" casing was run, with the shoe at 4848 ft. The well was then perforated, at 4 shots/foot, over the interval 4767-4777 ft. The Pl-80 sand was opened for oil production. On clean up to flow testing, the well flowed 417 BOPD with associated gas at the rate of 333 Mcfd. The GOR was 802 cu ft/bbl. The O.D. & E. rig was released at 1500 hrs on the 6th of November, 1985.

1. GENERAL DATA:

Well Name & Number: East Mereenie No. 24
Operator: Moonie Oil N.L.
Beneficial Interest Holders: The Moonie Oil Company Limited
 Flinders Petroleum N.L.
 Magellan Petroleum Australia Limited
Petroleum Title: Petroleum Lease No. 5
District: Alice Springs, Northern Territory
Location: Latitude: 24°02'27.45"S }Not
 Longitude: 131°38'48.2"E }Surveyed
Elevation: Ground Level: 2300 ft MSL
 Kelly Bushing: 2313 ft MSL
Total Depth: 4848 feet (DRILLER)
 4849 feet (LOGGER)
Spudded: 1200 hours, 10th October, 1985
Rig Released: 1500 hours, 6th November, 1985
Total Days Drilling: 27 days
Well Status: Oil producer from P1-80 sand unit
Geological Formation Tops:

Parke Siltstone	Surface
Mereenie Sandstone	774 feet
Carmichael Sandstone	2416 feet
Stokes Siltstone	2655 feet
Stairway Sandstone	3725 feet
Horn Valley Siltstone	4463 feet
Pacoota Sandstone	4688 feet

1. GENERAL DATA



LOCATION MAP

MEREENIE OIL & GAS FIELD WELL LOCATIONS

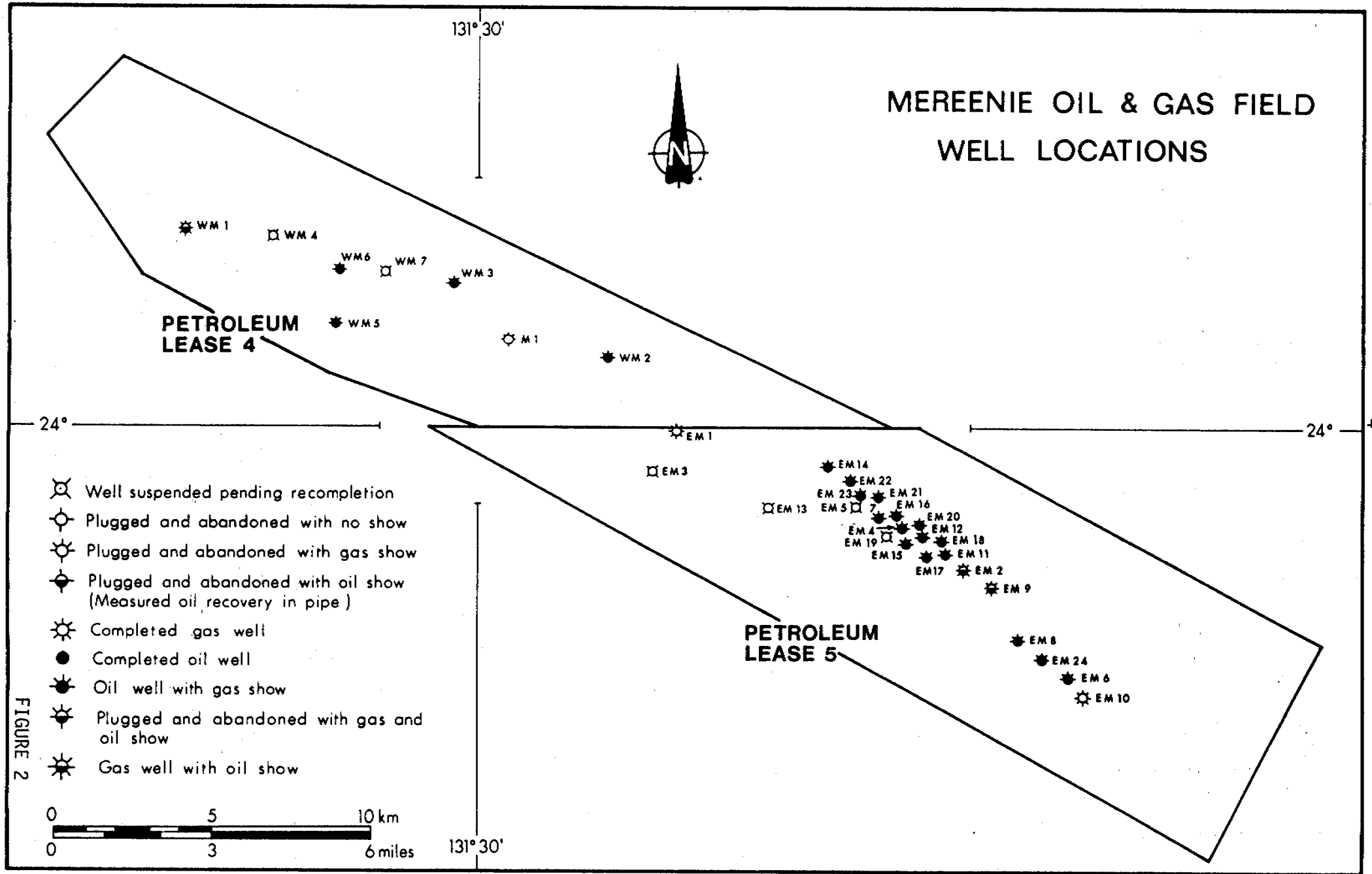


FIGURE 2

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2. ENGINEERING DATA

2. ENGINEERING DATA:

2.1 Rig Data:

Drilling Contractor:	O.D. & E.
Drilling Contractor Rig:	Rig 19
Drilling Plant:	Make: KREMCO
	Type: K600H
	Rated Capacity: 7500 FT
	Motors: GM 8V92TA
Mast: Make:	KREMCO
	Type: 109 FT
	Rated Capacity: 270000 lbs
Pumps:	Make 1: Gardner Denver PZ-7/550HP
	Make 2: Gardner Denver PAHBFC/275HP
	Type: TRIPLEX
	Size 1: 7" x 5-1/2"
	Size 2: 8" x 5"
Rotary Table:	Make: IDECO SR-175
	Capacity: 325 Tons
Blowout preventors:	Make 1: NL Shaffer Spherical 11" 5000 psi
	Make 2: NL Shaffer LWS 11" 5000 psi
	Size: 11"
	Rating (psi) 5000
Choke Manifold:	Make: Own
	Size & Type: 5000 lbs with 1 x 3" Positive and 1 x 3" adjustable choke

Mud Tanks:	Size & Capacity:	Suction Tank - 317BBL Shaker Tank - 271BBL Trip Tank - 33BBL
Shale Shaker:	Make:	Harrisburg
	Type:	Single Dual Deck
Mud Mixers:	Make:	Harrisburg
	Type:	8" x 6" Centrifugal
Desander:	Make:	DSN-1000
	Capacity:	800 GPM
Mud Cleaner:	Make	Harrisburg
	Model:	MC800
	Capacity:	800GPM
Drill pipe:		7000' 16.6 lbs Grade 'E' 4-1/2 "OD W/- 4" IF Connections.
Drill collars:		6 x 8" 24 x 6-1/2"
Air drilling equipment:		
Air compressors:	Make 1:	Gardner Denver
	Make 2:	Sullair
	Model 1:	WEN
	Model 2:	900/350
	Capacity 1:	860 CFM/350 PSI
	Capacity 2:	900 CFM/350 PSI
Air compressor booster:	Make:	Gardner Denver
	Model:	RLD
	Capacity:	To 1000 PSI

Diverter:

Make: Grant

Model: 70685

Injection pumps:(1)

Make: Gardner Denver

Model: Triplex HP

Capacity: 300 GPM

(2)

Make: Gardner Denver

Model: PZ7 Triplex

Capacity: 300 GPM

2.2 Drilling Record

The following is a summary of relevant drilling activities on a daily basis. Figure 3 is the annotated time/depth graph.

DATE	E.T.D. (FT)	DETAILS OF OPERATION, DESCRIPTIONS AND RESULTS
10/10/85	53	Moved in and rigged up O.D. & E. Rig No. 19. Spudded East Mereenie No. 24 at 1200 hours with 17-1/2" bit. Drilled 17-1/2" hole to 53 ft with air and stiff foam. Foam injection rate 11 bbls/hr.
11/10/85	113	Drilled 17-1/2" hole to 72 ft. POH to service hammer. RIH with RR1 and drilled 17-1/2" hole to 113 ft with air and stiff foam.
12/10/85	150	Drilled 17-1/2" hole to 125 ft. POH to check bit. RIH with RR1. Drilled 17-1/2" hole to 150 ft with air and stiff foam. POH to run conductor. Run 15" conductor to 150 ft and cemented with 48 sacks Class "A" cement with 2% CaCl ₂ . An average slurry weight of 15.2 ppg was maintained.
13/10/85	288	WOC. Cut conductor and weld on flowing nipple. Nipple up rotating head and blooey line. Pick up 8" drill collars. Make up stabilizers and NB No. 2. RIH, tag shoe. Drill out 4 ft cement. Drill 11" hole to 160 ft. POH. RIH, wash 30 ft to bottom. Drill 11" hole to 288 ft.
14/10/85	932	Commence misting to clear hole of cuttings. Drill 11" hole. Hole making small amounts of water from 320 ft. Water returns increased to approximately 400 bbl/hr @ 750 ft. Drill 11" hole to 932 ft.
15/10/85	1220	Drill 11" hole to 961 ft misting. POH. Lay out hammer. Make up new bit and shock sub. RIH with NB No. 3. Unload hole, drill 11" hole misting from 961 ft to 1220 ft.
16/10/85	1691	Drill 11" hole with air/foam from 1220 ft to 1691 ft.
17/10/85	1965	Drill 11" hole with air/foam from 1691 ft to 1965 ft. Blow hole clean and POH. Make up NB No. 4 and stabilizers. RIH.
18/10/85	2199	RIH. Unload hole. Ream from 1850 to 1930 ft. Drill 11" hole with air/foam from 1965 to 2199 ft.

19/10/85	2320	Drill 11" hole from 2199 to 2206 feet, blow hole clean. POH, change bit, RIH. Ream from 1980 to 2206 feet. Drill 11" hole with air/foam to 2320 ft.
20/10/85	2420	Drill 11" hole from 2320 to 2420 ft with air/foam, blow hole clean and POH to change bit. RIH and ream from 2248 to 2360 ft.
21/10/85	2807	Ream to 2420 ft, drill ahead with air/foam to 2807 ft.
22/10/85	2963	Drill 11" hole to 2963 ft. Strap out. Lay out drill collars. Nipple down rotating head cut conductor. Run 8-5/8" casing, shoe at 2960 ft.
23/10/85	3278	Circulate through 8-5/8" casing. Test lines and cement with 128 sacks of Class "A" cement with .2% HR-4. Displace and bump plug with 1300 psi. WOC. Nipple up and test BOPs and lines. Connect diverter to blooey line. Make up new BHA and bit, install rotating head. RIH tag cement at 2907 ft. Drill out cement and float to 2932 ft. Pressure test pipe rams and Hydril. Drill out cement and shoe. Drill 5 ft of formation and blow hole dry at 2968 ft. Drill 7-7/8" hole to 3278 ft.
24/10/85	4063	Drill 7-7/8" hole with air from 3278 to 4063 ft.
25/10/85	4426	Drill 7-7/8" hole with air from 4063 to 4220 ft. Blow hole clean and POH. Change bit and service roller reamer. RIH and ream from 4150 to 4220 ft. Drill 7-7/8" hole from 4220 to 4426 ft.
26/10/85	4446	Pull off bottom and run well flow test through flare line. Flow rate measured at 1.7 Mmcf/d. Drill 7-7/8" hole to 4446 ft, blow hole clean. Down hole fire started. Displace hole with 10.5 ppg oil based mud. Work tight hole and POH by singles and kelly to 4006 ft. Unable to pump, work tight hole. POH.
27/10/85	4446	POH and break out bit, RIH with BHA and break circulation at 4392 ft. Wash and ream to bottom, circulate gas cut mud through poor boy degasser. POH and slip and cut 41 ft of drilling line. Change out Grant diverter and install flowline. Make up Howco test tools and RIH to conduct DST No. 1. 4378-4446 ft (Lower Stairway LS-160 Sand). Opened tool, packer seat failed, drop bar and reverse circulate. POH with test tools.

28/10/85	4477	Make up Howco test tools, change packer depth. RIH for DST No. 2 4298-4446 ft (Lower Stairway LS-160 Sand). Opened tool and packer seat failed, drop bar and reverse circulate. POH and lay out test tools. Make up bit and junk sub and RIH. Rotate on junk and work junk sub, 4 ft fill on bottom. Drill 7-7/8" hole to 4477 ft with oil base mud.														
29/10/85	4530	Drill 7-7/8" hole with oil mud from 4452 to 4530 ft. Spot pill and drop survey.														
30/10/85	4686	POH and retrieve survey. Make up new bit. RIH. Drill 7-7/8" hole from 4530 to 4686 ft.														
31/10/85	4788	Drill 7-7/8" hole to 4788 ft, drop survey. Layout drilling tools, make up test tools.														
1/11/85	4788	Make up test tools and RIH. Run DST No. 3 (4760 to 4788 ft). Tool opened at 1046 hrs for 15 minutes with immediate moderate blow. Tool shut in for 30 minutes. Final flow 142 minutes. Final shut in 315 minutes. GTS 17 minutes at 333 Mcfd. OTS 39 minutes at 500 BOPD. Tested well for 1 hr 12 min on 1/2" choke. Lab. read pressures (bottom chart) :- <table border="0" style="margin-left: 40px;"> <thead> <tr> <th>IHP</th> <th>IFP</th> <th>ISIP</th> <th>FFP</th> <th>FSIP</th> <th>FHP</th> <th>BHT^oF</th> </tr> </thead> <tbody> <tr> <td>2682.5</td> <td>474</td> <td>1675.6</td> <td>560.5</td> <td>1704.1</td> <td>2666.7</td> <td>141^o</td> </tr> </tbody> </table> <p>Drop bar reverse circulate POH. Make up BHA and Bit No. 11.</p>	IHP	IFP	ISIP	FFP	FSIP	FHP	BHT ^o F	2682.5	474	1675.6	560.5	1704.1	2666.7	141 ^o
IHP	IFP	ISIP	FFP	FSIP	FHP	BHT ^o F										
2682.5	474	1675.6	560.5	1704.1	2666.7	141 ^o										
2/11/85	4848TD	Drill 7-7/8" hole to 4848 ft with oil mud, drop survey. POH to log.														
3/11/85	4848	Run logs with Gearhart. RIH to clean and condition hole. Wash 60 ft to bottom. POH (sideways), rig up to run 5-1/2" casing.														
4/11/85	4848	Run 5-1/2" casing. Circulate and cement with 368 sacks of class G cement treated with 0.5% Hallad 22-A and 0.75% CFR-2. Cut excess casing, nipple down BOP's. Dress stub.														
5/11/85	4848	Nipple up tubing head. Pressure test OK. RIH with 2-3/8" tubing and casing scraper. POH lay out scraper. Rig up with Gearhart and run CBL.														
6/11/85	4848	Make up perforating guns, packer and subs. RIH with tubing conveyed perforating gun. Set packer with Gearhart. Pressure test annulus to 1000 psi OK. Drop bar and perforate. Flow well to clean and conduct flow test. Rig released at 1500 hrs.														

2.3 Hole Sizes and Depths:

17-1/2" to 150 feet

11" to 2963 feet

7-7/8" to 4848 feet

2.4 Casing and Cementing Record:

15" conductor:	Weight:	1/4" wall ERW
	Grade/ Connections	Butt welded
	Shoe Depth:	150 ft
	Cement Used:	48 sacks Class "A"
	Additives:	2.0% CaCl ₂
	Slurry Weight:	15.2 ppg
8-5/8" casing:	Weight:	32 lb/ft
	Grade/ Connections:	K55 8 Round ST & C
	No. of Joints:	76
	Total Length:	2960 ft
	Shoe Depth:	2960 ft
	Cement Used:	128 sacks Class "A"
	Additives:	0.2% HR-4
	Slurry Weight:	15.2 lb/gal

5-1/2" casing:

Weight:	14 lbs/ft
Grade/ Connections:	J55 8 Round ST & C
No. of Joints:	124
Total Length:	4857 ft
Shoe Depth:	4848 ft
Cement Used:	368 sacks Class "G"
Additives:	0.5% HALLAD 22-A 0.75% CFR-2
Slurry Weight:	15.4 LB/GAL

2.5 Drilling Fluids:

A summary of the daily drilling fluid properties is listed below in Table 1.

TABLE 1

DEPTH IN KB (FT)	DAYS FROM SPUD	FLUID TYPE	INJECTION ADDITIVE	INJECTION RATE (LBS/HR)	MUD WEIGHT (PPG)	FUNNEL VISCOSITY (SEC/ORT)	PLASTIC VISCOSITY (CP)	YIELD POINT (LBS/100FT ²)	CAKE THICKNESS (32nd of in)	GEL STRENGTH		WATER LOSS (CC)	OIL/WATER RATIO % *	SOLIDS CONTENT %	SAND CONTENT %	PH	SALINITY x 1000 PPM	ELECT. STABILITY (VOLTS)	FLUID LOSS (-) OR GAIN (+) to FORMATION = (b) s - hr ²	FORMATION
										SEC	MIN									
53	1	AIR	FOAM	11																PARKES SILTSTONE
113	2	AIR	FOAM	9.5																PARKES SILTSTONE
149	3	AIR	FOAM	8																PARKES SILTSTONE
288	4	AIR	FOAM	4.5																PARKES SILTSTONE
931	5	AIR	FOAM	5.0																PARKES, MEREENIE SS
1220	6	AIR	FOAM	5.0																EREENIE SANDSTONE
1691	7	AIR	FOAM	5.5																EREENIE SANDSTONE
1964	8	AIR	FOAM	11																EREENIE SS QUARTZITE
2197	9	AIR	FOAM	11																EREENIE QUARTZITE
2320	10	AIR	FOAM	11																MER QTZITE, LOW MER
2420	11	AIR	FOAM	6																LOWER MEREENIE SS
2808	12	AIR	FOAM	6																L.MER, CARM, U. STOKES
2960	13	AIR	FOAM	9																UPPER STOKES ST
3282	14	AIR																		U.STOKES SILTSTONE
4063	15	AIR																		U&L STOKES, U&M STWY
4426	16	AIR																		M&L STAIRWAY
4446	17	OMUD			10.5	50	25	20	1	3/5	3.6	75-25	20	0.5		140	210	-	3	LOWER STAIRWAY
4446	18	OMUD			10.4	49	24	22	1	3/6	3.8	75-25	19	0.5		180	230			LOWER STAIRWAY
4477	19	OMUD			10.5	52	29	27	2	5/8	2.4	75-25	18	1.5		180	310			L.STWY, HORN VALLEY
4530	20	OMUD			10.5	52	33	32	2	6/10	3.5	77-23	7	0.5		170	430			HORN VALLEY
4685	21	OMUD			10.6	55	28	34	2	7/10	2.9	77-23	18	0.75		170	550			HORN VALLEY
4788	22	OMUD			10.5	55	30	32	2	7/10	2.1	79-21	18	0.75		190	400			PACCOOTA P1

EAST MEREENIE NO. 24 - DRILLING FLUID SUMMARY

2.6 Bit Record:

A summary of the drilling bits used is listed below in Table 2.

TABLE 2

DEPTH IN KB (FT)	DAYS FROM SPUD	BIT NO.	SIZE (INCHES)	MAKE	TYPE	JET SIZE 32nds Inch			SERIAL NO.	DEPTH OUT KB (FT)	DRILLED FOOTAGE	HOURS	AVERAGE FEET PER HOUR	ACCUMULATED DRILLING HOURS	WCS x 1000 LBS	RPI	VERTICAL DEVIATION (DEGS)	PUMP PRESSURE (PSI)	DRILLING FLUID TYPE	SPM		MUD DATA			BIT CONDITION			FORMATION
						1	2	3												PUMP NO. 1	PUMP NO. 2	MUD HEIGHT (LBS/GAL)	VISCOSITY (SEC)	WATER LOSS (CC)	TEETH	BEARINGS	GAUGE (IMS)	
0	1	RR1	17.5	HTC	3XA	-	-	-	MF421	150	150	51.5	2.91	51.5	5	70	0.0	150	FOAM				1	1	IN	PARKE SILTSTONE		
150		NB2	11.0	VAREL	V537	-	-	-	16145	971	821	31.0	26.5	82.5	10	60	0.5	270	FOAM				2	2	IN	PARKE SILTSTONE/MEREENIE		
971	5	NB3	11.0	VAREL	V537	-	-	-	16596	1930	959	49.0	19.6	131.5	25	70	0.625	450	FOAM				3	3	0.25	MEREENIE SANDSTONE		
1930	10	NB4	11.0	VAREL	V537	-	-	-	16068	2206	276	29.5	9.36	161	35	70	0.75	520	FOAM				4	4	0.5	MEREENIE QUARTZITE		
2206	10	NB5	11.0	VAREL	V537	-	-	-	15421	2420	214	25.5	8.56	186	35	70	0.75	550	FOAM				5	5	0.38	MER QUARTZITE, LOW MER		
2420	11	NB6	11.0	VAREL	V537	-	-	-	15188	2963	153	26.6	20.9	212	35	70	0.375	600	FOAM				6	6	0.19	CARMICHAEL, U. STOKES		
2963	14	NB7	7.875	HTC	J22	-	-	-	XX744	4220	1257	36	34.9	248	7	65	0.5	200	AIR				7	7	0.06	L. STOKES, U. STOKES		
4220	16	NB8	7.875	HTC	J44	-	-	-	PA698	4446	226	13	17.4	261	25	45	1.4	150	AIR				8	8	IN	H. STOKES, L. STOKES		
4446	20	NB9	7.875	HTC	J44	12	12	12	FA643	4530	84	25	3.36	286	30	50	2.75	800	OHUD				9	9	IN	HORN VALLEY ST		
4530	21	NB10	7.875	HTC	J22	12	12	12	XX534	4788	258	39	6.61	355	30	50	3.00	800	OHUD				10	10	0.13	PACOOTIA P1		
4788	23	NB11	7.875	HTC	J44	12	12	12	EC945	4848	60	22.5	2.67	377.5	38	55	3.00	800	OHUD				11	11	IN	PACOOTIA P1		

EAST MEREENIE NO. 24 BIT RECORD

2.7 Deviation Record:

A list of deviation surveys and relevant computations is listed below in Table 3.

TABLE 3

DEPTH KB (FT)	SURVEY NO.	DEVIATION ANGLE (DEGS) B	DEPTH INTERVAL (2A-1A = C)	MEAN DEVIATION (DEGS) (1B+2B = D)	DEPTH CORRECTION (FT) C-(CxCOSD)	CUMULATIVE CORRECTION (FT)	TRUE VERTICAL DEPTH (FT) (C x COSD)	LATERAL DRIFT (FT) (C x SIND)	CUMULATIVE LATERAL (FT)
412	1	0.0	412	0.0	-	-	412	0.0	0.0
768	2	0.25	356	0.125	-	-	768	0.78	0.78
961	3	0.75	193	0.50	-	-	961	1.68	2.46
1306	4	0.75	345	0.75	0.03	0.038	1306	4.52	6.98
1652	5	0.5	346	0.625	0.02	0.058	1652	3.77	10.75
1998	6	0.5	346	0.5	0.013	0.071	1998	3.02	13.77
2187	7	1.0	189	0.75	0.016	0.087	2187	2.47	16.24
2407	8	0.75	220	0.875	0.026	0.113	2407	3.36	19.6
2722	9	0	315	0.375	0.007	0.12	2722	2.06	21.66
3050	10	1.0	328	0.5	0.012	0.132	3050	2.86	24.52
3396	11	1.0	346	1.0	0.053	0.185	3396	6.04	30.56
3710	12	0.25	314	0.625	0.019	0.204	3710	3.43	33.99
4063	13	1.75	353	1.0	0.053	0.258	4063	6.16	40.15
4377	14	3.0	314	2.375	0.269	0.526	4377	13.01	53.16
4429	15	2.75	52	2.875	0.065	0.591	4428	2.608	55.77
4530	16	3.0	101	2.875	0.127	0.718	4529	5.066	60.84
4749	17	3.00	219	3.0	0.300	1.018	4748	11.46	72.30
4848	18	3.00	60	3.0	0.08	1.100	4847	3.14	75.44

EAST MEREENIE NO. 24

DEVIATION RECORD

2.8 Formation Testing:

Three open hole conventional drill stem tests were run. Tests 1 and 2 attempted to test the LS-160 sand unit, Test No. 3 tested the P1-80 sand unit.

Test summaries are listed below, with full details in Appendix 2:-

Drill Stem Test No. 1

Interval: 4378 - 4446 ft
 Date: October, 28, 1985
 Tester: Halliburton Services
 Formations: Lower Stairway Sandstone LS-160 Sand Unit
 Type of Test: Conventional, Open Hole, Dual Packer
 Water cushion: NIL
 Elapsed Times: N/A
 Field Pressures: N/A
 Field Results: Opened tool. Packer seat failed. Miss run test.

Drill Stem Test No. 2:

Interval: 4298 - 4446 ft
 Date: October, 29, 1985
 Tester: Halliburton Services
 Formations: Lower Stairway Sandstone LS-160 Sand Unit
 Type of Test: Conventional, Open Hole, Dual Packer
 Water cushion: NIL
 Elapsed Times: N/A
 Field Pressures: N/A
 Field Results: Tool opened. Packer seat failed.

Comments: This was the second attempted test of the LS-160. Both DST No. 1 and No. 2 failed due to packer seat failure. The down hole fire experienced over this zone, is thought to have caused severe hole caving preventing suitable packer seats.

Drill Stem Test No. 3:

Interval:	4760 - 4788 ft
Date:	November, 1, 1985
Tester:	Halliburton Services
Formations:	Pacoota Pl-80 Sand Unit
Type of Test:	Conventional, Open Hole, Dual Packer
Water cushion:	NIL
Elapsed Times:	Initial Flow: 15 mins
	Initial Shut-In: 30 mins
	Final Flow: 142 mins
	Final Shut-In: 315 mins
	Total Flow: 157 mins
	Seperator Flow: 72 mins
Field Pressures:	Bottom Chart
	Initial Hydrostatic: 2682.5 psig
	Initial Flow: 474 psig
	Initial Shut-In: 1675.6 psig
	Final Flow: 560.5 psig
	Final Shut-In: 1704.1 psig
	Final Hydrostatic: 2666.7 psig
	Well Head Flowing Pressure: 150 psig

Field Results: Opened tool with a moderate blow increasing to strong. 92 psi after 15 minutes. Final flow: Opened with strong blow at 27 psi. GTS in 17 minutes at 333 Mcfd. OTS 39 minutes flowing 48.9 API oil at 500 BOPD on a 1/2" choke. GOR 668 cu ft/bbl.

Chart profiles show a valid test.

2.9 Completion Data:

5-1/2" Casing was run and cemented to total depth. The casing was then perforated over the interval 4767 to 4777 ft (P1-80 sand unit) using a Gearhart tubing conveyed perforating gun.

Figure 4 is a diagram of the Well Completion Summary.

Figure 5 is a diagram of the East Mereenie No. 24 Well Head Assembly.

Spudded 10th October, 1985 at 1200 hrs

EAST MEREENIE No. 24 TIME / DEPTH GRAPH

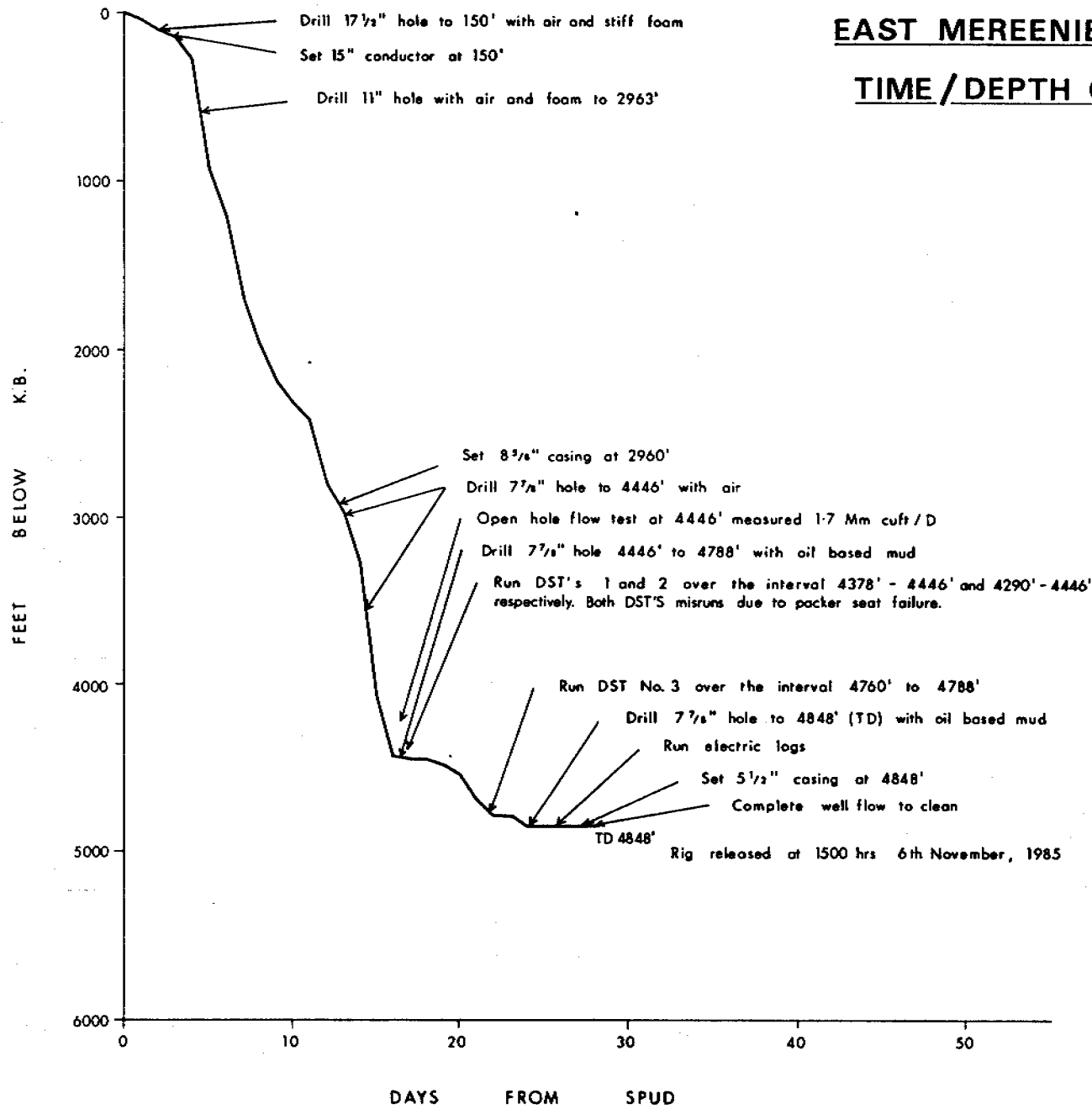
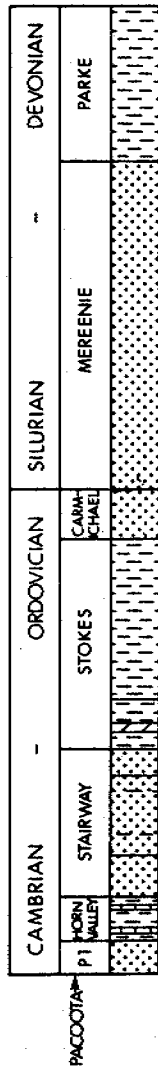
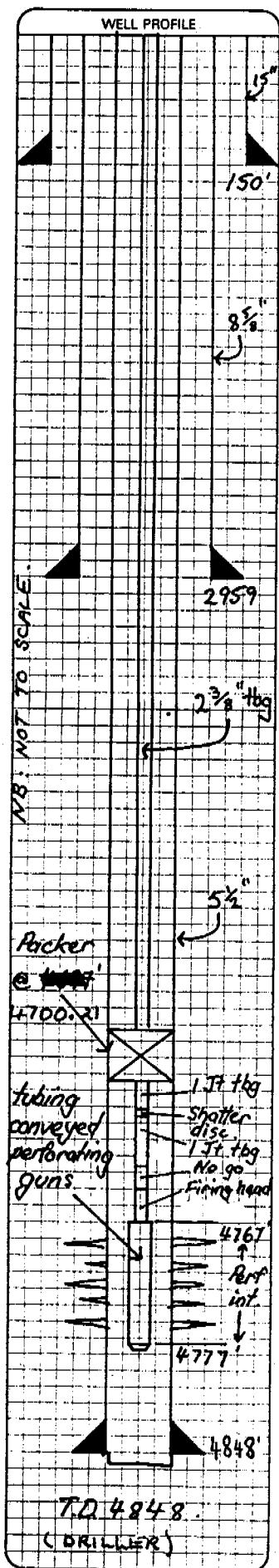


FIGURE 3

**MOONIE OIL N.L.
WELL COMPLETION SUMMARY**

DATE: 6 11 85
DAY MONTH YEAR



WELL NAME EAST MEREENIE NO. 24
 WELL LOCATION
 K.B. ELEVATION K.B. TO CASING FLGE 14.55 K.B. TO TUBING FLGE 12.70

	SIZE (O.D.)	WEIGHT	SET AT TOP	INTERVAL DEPTH
CASING	8-5/8"	32	2959	
CASING	5-1/2"	14	4848	

 PERFS 4767 TO 4777 FEET
 DIAMETER OPEN HOLE 7-7/8"
 TUBING: SIZE 2-3/8" O.D. WEIGHT 4.7 kg/m GRADE J55
 TYPE/CLASS EUE MAKE NKK JAPAN
 No. OF JOINTS ON LOCATION 156 TALLIED LENGTH 4882'
 No. of JOINTS PERMANENTLY IN WELL 152 TALLIED LENGTH 4760.10'

FINAL TUBING STRING FROM BOTTOM UPWARD

DESCRIPTION	LENGTH ft	SET AT TOP	REMARKS
PERF GUN	12 00	4767	TOP SHOT
FIRING HEAD	1 66	4766.13	
NO GO NIPPLE	77	4764.47	
1 JT 2-3/8" TBG	31 34	4763.70	
VENT SUB	85	4732.36	
1 JT 2-3/8" TBG	31 30	4731.51	
UNI PACKER 6	6 60	4700.21	GUIBERSON
2 JTS 2-3/8" TBG	62 60	4693.61	
2-3/8" PUP JOINT	6 10	4631.01	
148 JTS 2-3/8" TBG	4634 84		
PUP JOINT 2-3/8"	7 80		
TBG HANGER	84		BARBER BPN PROFILE
TOTAL STRING LENGTH	4796.70		
K.B. TO TUBING HANGER FLANGE (PLUS)	14.55		
SETTING DEPTH K.B.	4811.25		
TIME PIPE STARTED	0300		
TIME ON BOTTOM	0830		
CASING INTERNAL DEPTH BY TUBING	4806 FT.		

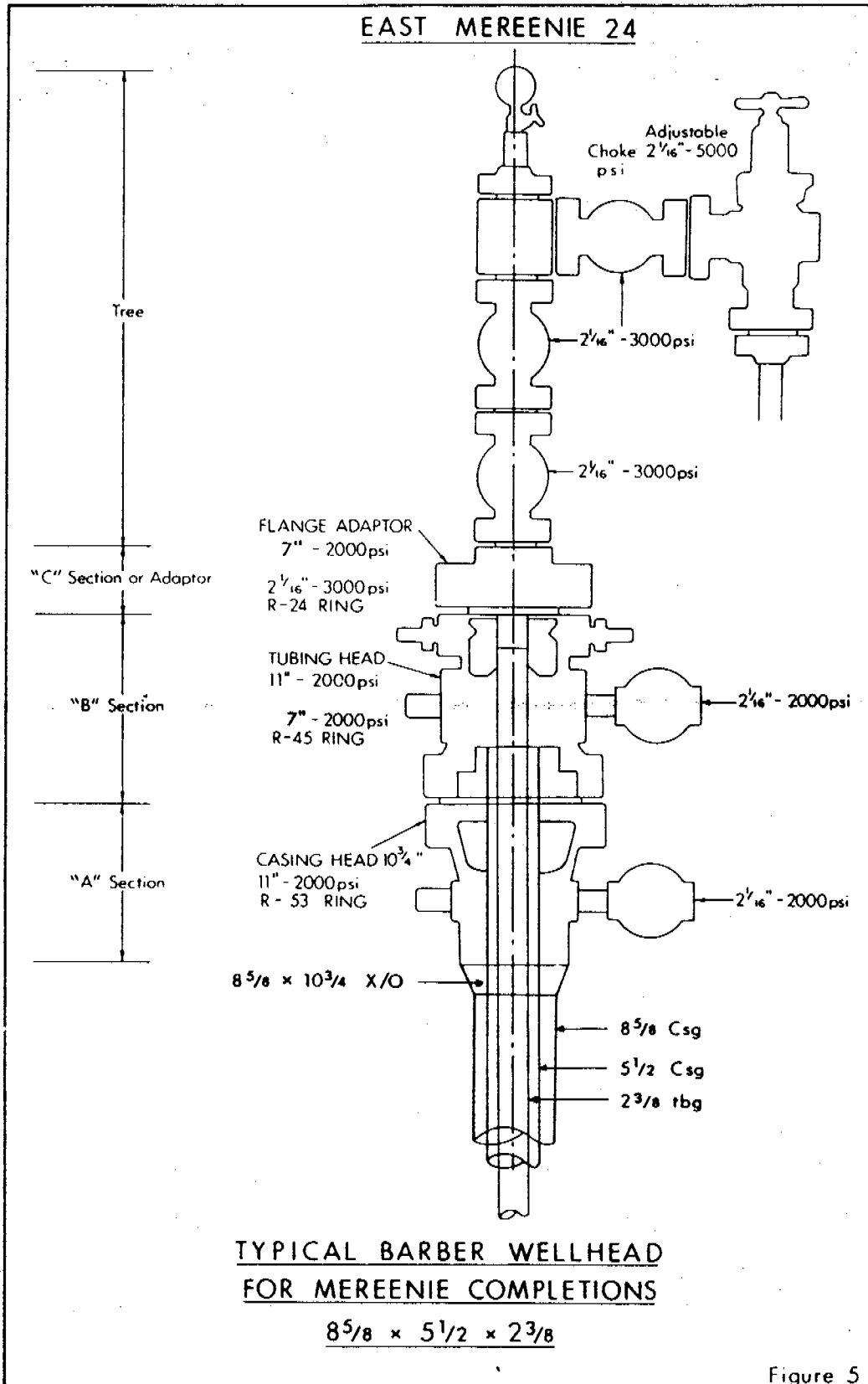
WEIGHT OF TUBING STRING 18500 WEIGHT ON PACKER WEIGHT ON HANGER 19000
 WELLHEAD 2" W.P. 3000 MAKE BARBER FLANGED/SCREWED
 MASTER VALVE TYPE GATE MAKE BARTON SIZE 2' 5000
 CASING VALVES TYPE GATE MAKE BARTON SIZE 2' 3000
 CHOKE 2" TYPE ADJ MAKE BARBER

REMARKS (Note Additional Equipment)
 PACKER SET @ 4700.21

COMPLETE IN DETAIL

- TD, PBTD
- Casing & Tubing Depths
- Perforations
- Packers, Nipples, etc.

REX YOUNG
AGENT/OPERATOR'S SIGNATURE



3. G E O L O G I C A L D A T A

3. GEOLOGICAL DATA:

3.1 Stratigraphy:

East Mereenie No. 24 was spudded in the Middle to Late Devonian Parke Siltstone and reached total depth in the Late Cambrian to Early Ordovician Pacoota Sandstone. There were no abnormal thickness variations between East Mereenie No. 24 and the nearby East Mereenie No. 6 and 8 wells.

The complete stratigraphy of East Mereenie No. 24 is shown in Table 4.

3.2 Formation Sampling:

(1) Ditch Cuttings -

Cutting samples were collected at 30 foot intervals from 230 to 4680 ft with 10 foot samples collected at prognosed formation tops. 10 Foot samples were collected from 4680 ft to total depth with 5 foot samples collected at prognosed formation tops.

The cuttings were retained and split as follows:-

Moonie:	1 set unwashed
	1 set washed and dried
Magellan:	1 set washed and dried
NT Dept of Mines:	1 set unwashed
	1 set washed and dried

For detailed sample descriptions, see Appendix 1.

(2) Coring -

No conventional or sidewall cores were cut in this well.

3.3 Logging and Surveys:

(1) Wireline Logging -

<u>LOG</u>	<u>RUN</u>	<u>INTERVAL</u>	<u>DATE</u>
GR	1	4848- 28 ft	
CDL-CNS	1	4848-3550 ft	3/11/85
DIL-GR	1	4840-3618 ft	3/11/85
CBL-GR	1	4799-3491 ft	3/11/85
CCL-GR	1	4580-4715 ft	6/11/85

(2) Velocity Survey -

No velocity survey was run in this well.

TABLE 4
EAST MEREENIE NO. 24 STRATIGRAPHIC TABLE

SYSTEM & SERIES	FORMATION	SUB UNIT	DEPTH (FT)			TRUE THICKNESS	AVERAGE FORMATION DIP	AVERAGE WELL DEVIATION
			KB	TVD	MSL			
MIDDLE TO LATE DEVONIAN	PARKE SILTSTONE		13	13	+2351	761+	3	0
MIDDLE DEVONIAN TO LATE SILURIAN	MEREENIE SANDSTONE		774	774	+1590	1642	3	0.25
LATE ORDOVICIAN	CARMICHAEL SANDSTONE		2416	2416	-52	239	3	0.75
MIDDLE ORDOVICIAN	STOKES SILTSTONE	UPPER	2655	2655	-291	813	3	0.5
		LOWER	3468	3468	-1104	257	3	1.0
	STAIRWAY SANDSTONE	UPPER	3725	3725	-1361	130	3	0.25
		MIDDLE	3855	3855	-1491	397	3	0.5
		LOWER	4252	4252	-1888	210	3	2.0
EARLY ORDOVICIAN	HORN VALLEY SILTSTONE		4463	4462	-2098	225	3	3.0
EARLY ORDOVICIAN TO LATE CAMBRIAN	PACOOTA SANDSTONE	P1 P2 P3 P4	4688	4687	-2323	160+	3	3.0
LATE CAMBRIAN	GOYDER FORMATION							
	TOTAL DEPTH		4848	4847	-2483			

(3) Penetration Rate and Gas Log -

The penetration rate was recorded continuously from 40 ft to total depth.

Formation gas was monitored continuously by a conventional hotwire gas detection unit from 3435 ft to total depth.

A field mud log showing penetration rate, gas response, lithological and pertinent engineering data was prepared at the wellsite daily and is included in this report as Enclosure 1.

An interpreted composite log is included as Enclosure 2.

(4) Deviation Surveys -

East Mereenie No. 24 was not a deviated hole. Maximum deviation was 3 degrees at total depth. True vertical depth at total depth was 4847 ft with a horizontal moveout of 75.4 ft.

The estimated formation dip was 3 degrees, this dip is supported by the maximum natural deviation of 3 degrees.

(5) Temperature Surveys -

No temperature surveys were run in the hole. The following temperatures were measured:-

Halliburton Gauge: DST No. 3 4760-4788' 141^oF
Gearhart Logs: 128^oF

3.4 Formation Dips:

The estimated formation dip, from seismic interpretation was 3 degrees SSW of the location. No evidence to disprove this dip was encountered in this well.

3.5 Formation Evaluation:

The sand data sheets, Table's 5 and 6, for the Lower Stairway and Pacoota Formations list the relevant sand evaluation data.

EAST MEREENIE NO. 24 STAIRWAY SANDSTONE SAND DATA SHEET

TABLE 5

STRATIGRAPHIC CORRELATION		GROSS SAND GR ≤ 80 API		NET SAND ∅ CDL ≥ 4%				NET SAND ∅ CDL ≥ 6%			
SAND NAME	INTERVAL KB - FT	INTERVAL KB - FT	t FT	INTERVAL KB - FT	t FT	% AV ∅	% MAX ∅	INTERVAL KB - FT	t FT	% AV ∅	% MAX ∅
<u>U. STAIR</u>											
US-10	3725-3754	3725-3741	16								
US-10		3743-3752	9								
US-10				3752-3754	2	5	6				
US-40	3759-3765	3760-3765	5	3759-3761	2	5	6.5				
US-80	3771-3797	3771-3773	2								
US-80		3791-3795	4								
US-80				3795-3797	2	5	6.5				
US-100	3801-3847	3801-3814	13	3807-3810	3	5	6				
US-100		3816-3846	30	3822-3827	5	5	6.5				
US-100				3831-3833	2	5	6				
US-150	3847-3855	3849-3855	6	3838-3855	17	8.5	12	3841-3855	14	9.5	12
			85		33				14		
<u>M. STAIR</u>											
				3855-3858	3	6.5	8.5	3855-3857	2	7.5	8.5
		3877-3884	7	3861-3867	6	4.5	5.5	3880-3886	6	7	8.5
				3878-3887	9	6.5	8.5				
			7		18				8		
<u>L. STAIR</u>											
LS-10	4252-4280	4252-4255	3								
LS-10		4275-4280	5								
LS-50	4294-4327	4294-4306	12								
LS-50		4309-4313	4								
LS-50		4325-4327	2								
LS-80	4331-4351	4331-4336	5								
LS-150	4391-4399	4391-4399	8								
LS-160	4403-4463	4406-4463	57								
			96								
STAIRWAY SANDSTONE TOTAL			188		102				22		

EAST MEREENIE NO. 24 PACOOTA SANDSTONE SAND DATA SHEET

TABLE 6

STRATIGRAPHIC CORRELATION		GROSS SAND GR \leq 80 API		NET SAND ϕ CDL \geq 4%				NET SAND ϕ CDL \geq 6%			
SAND NAME	INTERVAL KB - FT	INTERVAL KB - FT	t FT	INTERVAL KB - FT	t FT	% AV ϕ	% MAX ϕ	INTERVAL KB - FT	t FT	% AV o	% MAX o
P1 MISC P1-40	4725-4727	4725-4727	2	4725-4727	2	4.5	4.5	4730-4737 4741-4748 4769-4775	7 7 6	7 7.5 10.3	8.5 8.5 13.5
	4730-4748	4730-4734 4741-4747	4 6	4730-4738 4741-4749	8 8	6.5 7	8.5 8.5				
		4768-4775 4787-4795 4801-4810	6 8 9	4768-4776	8	8.8	13.5				
P1-80 P1-110 P1-120			35		26				20		
PACOOTA SANDSTONE TOTAL			35		26				20		

3.6 Relevance to the Appraisal Programme:

East Mereenie No. 24 proved the continuation of the P1-80 oil producing reservoir intersected in East Mereenie No's. 6 and 8.

The gas/oil contact assumed to be at -2130 ft MSL was not detected in this well.

Drill Stem Test No. 3 (4760-4788 ft) tested the P1-80 sand and flowed 500 BOPD and 333 Mcfd. Drill stem tests over equivalent zones in East Mereenie No's. 8 and 6, flowed oil at 540 BOPD and 320 BOPD respectively. The P1-80 net sand ($\phi > 6\%$) thickness in East Mereenie No. 24 was 6 ft, compared with East Mereenie Nos. 8 and 6 where the net sand thicknesses were 4 ft and 3 ft respectively. Average log porosities were; East Mereenie No. 8 - 10.5%, East Mereenie No. 6 - 11% and East Mereenie No. 24 - 10.3%. East Mereenie No. 24's drill stem test results are similar to East Mereenie No's. 8 and 6.

The Lower Stairway Sandstone was drilled with air. Gas shows at 4426 ft warranted an open hole flow test. The well flowed at 1.7 Mmcf/d. The Lower Stairway was logged through casing, so reliable log porosities are not available.

The formation dip in this well was estimated, from seismic, at 3 degrees, to the SSW. Formation tops and natural deviation support this estimated dip.