

EAST MEREENIE NO. 25
WELL COMPLETION REPORT
PETROLEUM LEASE NO. 5, NORTHERN TERRITORY
BY
MOONIE OIL N.L.
APRIL 1987



R86/25B

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S U M M A R Y

SUMMARY

East Mereenie No. 25 is the twenty sixth well in the current Mereenie Field Appraisal and Development programme. It was designed to be completed for oil production from the P1-80 reservoir on the southern flank of the Mereenie Anticline.

The well is located 1100 meters on a true bearing of 274 degrees from East Mereenie No. 24 and 700 meters on a true bearing of 201 degrees from East Mereenie No. 19.

The well spudded in Parke Siltstone on the 7th November 1985 using the O.D. & E. Rig No. 19 and reached TD at 4940 ft on the 20th April 1986 in the Pacoota (P1) Sandstone.

The well was drilled with air to 150 ft where 15" conductor was set. An 11" hole was drilled to 3065 ft with air/mist and foam where 8-5/8" casing was run. Drilling continued in 7-7/8" hole with air to 4148 ft where the BHA twisted off. After successfully retrieving the fish the hole was drilled to 4328 ft where the near bit reamer twisted off. The fish was retrieved and the hole was drilled on junk to 4372 ft. The hole was then displaced with oil based mud but pumping failed to get returns. Various methods of lost circulation control was used to plug a suspected casing leak with no success. Eventually two cement plugs were set at 4372 ft and 3145 ft respectively. After cutting the conductor away from the 8-5/8" casing and failing to pull the 8-5/8" casing out of the hole the 8-5/8" casing was washed over to 120 ft and was cut and pulled.

The washover procedure continued to 186 ft where it became apparent that the top of the 8-5/8" casing remaining in the hole was bent inwards. After successfully milling down to 124 ft and another unsuccessful attempt at pulling the 8-5/8" casing had been made the O.D. & E. rig was released at 0400 hours on the 15th December 1985.

The Haffner OIME SL 750 Rig No. 1 was spotted over East Mereenie No. 25 on the 23rd January 1986. After several milling runs and several attempts to spear and pull the casing free it was concluded that the assemblies had sidetracked the 8-5/8" casing remaining in the hole, and the hole was suspended on the 29th January 1986.

The same rig was rigged up over the East Mereenie No. 25 location on the 28th March 1986. A downhole camera was used to inspect the fish. After several attempts to pull casing loose it was eventually successfully retrieved after a washover operation. An 8-5/8" lead seal casing patch was run after the 8-5/8" casing was cut and retrieved at 275 ft. The patched 8-5/8" casing was cemented and after the remaining junk was cleaned from the hole the cement plugs were drilled out. Drilling of new 7-7/8" hole with oil based mud commenced on the 11th April 1986 and total depth of 4940 ft was reached on 17th April 1986.

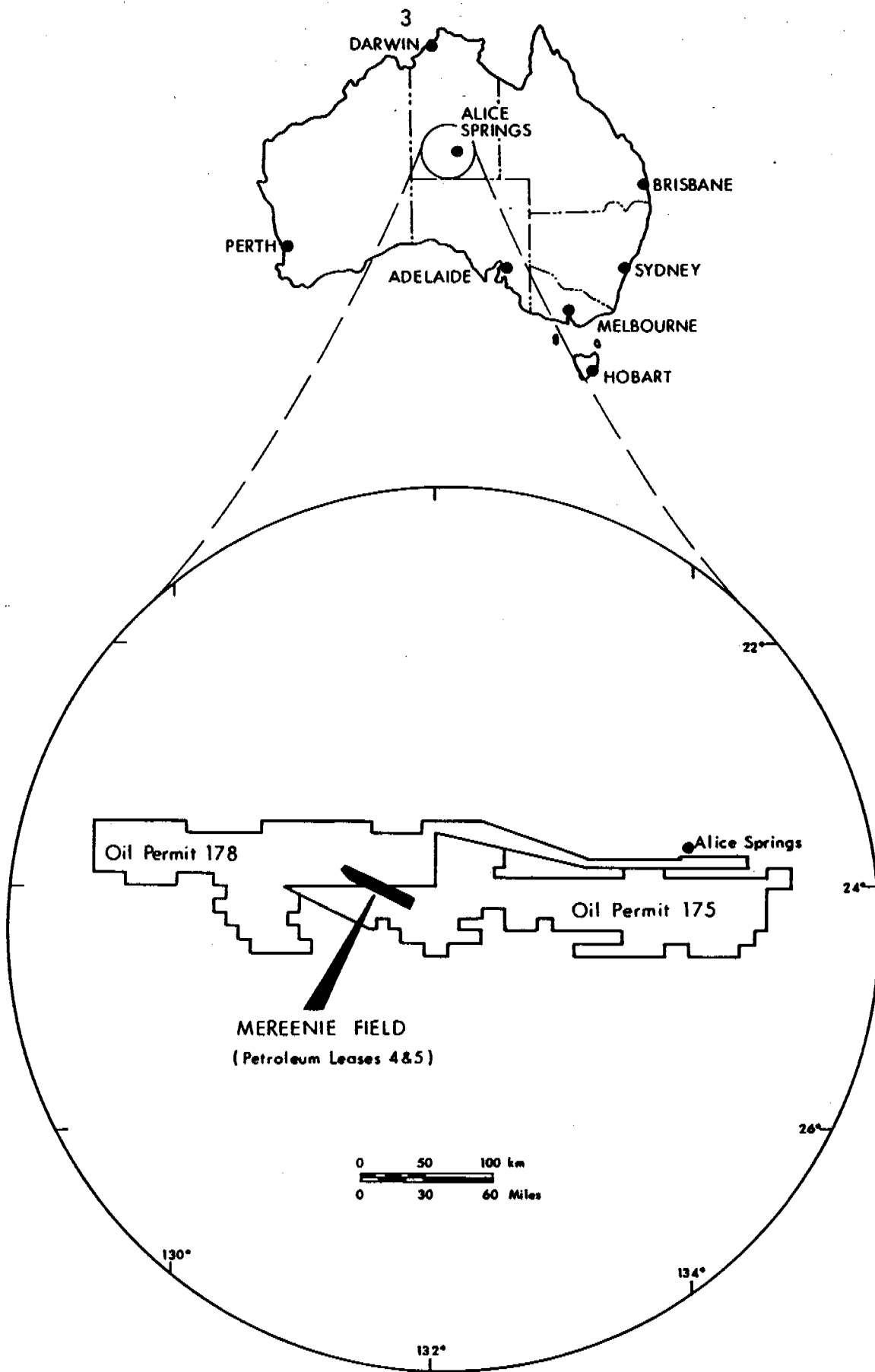
After logging, running 5-1/2" casing, perforating and running 2-3/8" tubing, the well was completed as an oil well producing from the P1-80 reservoir.

1. GENERAL DATA

1. GENERAL DATA:

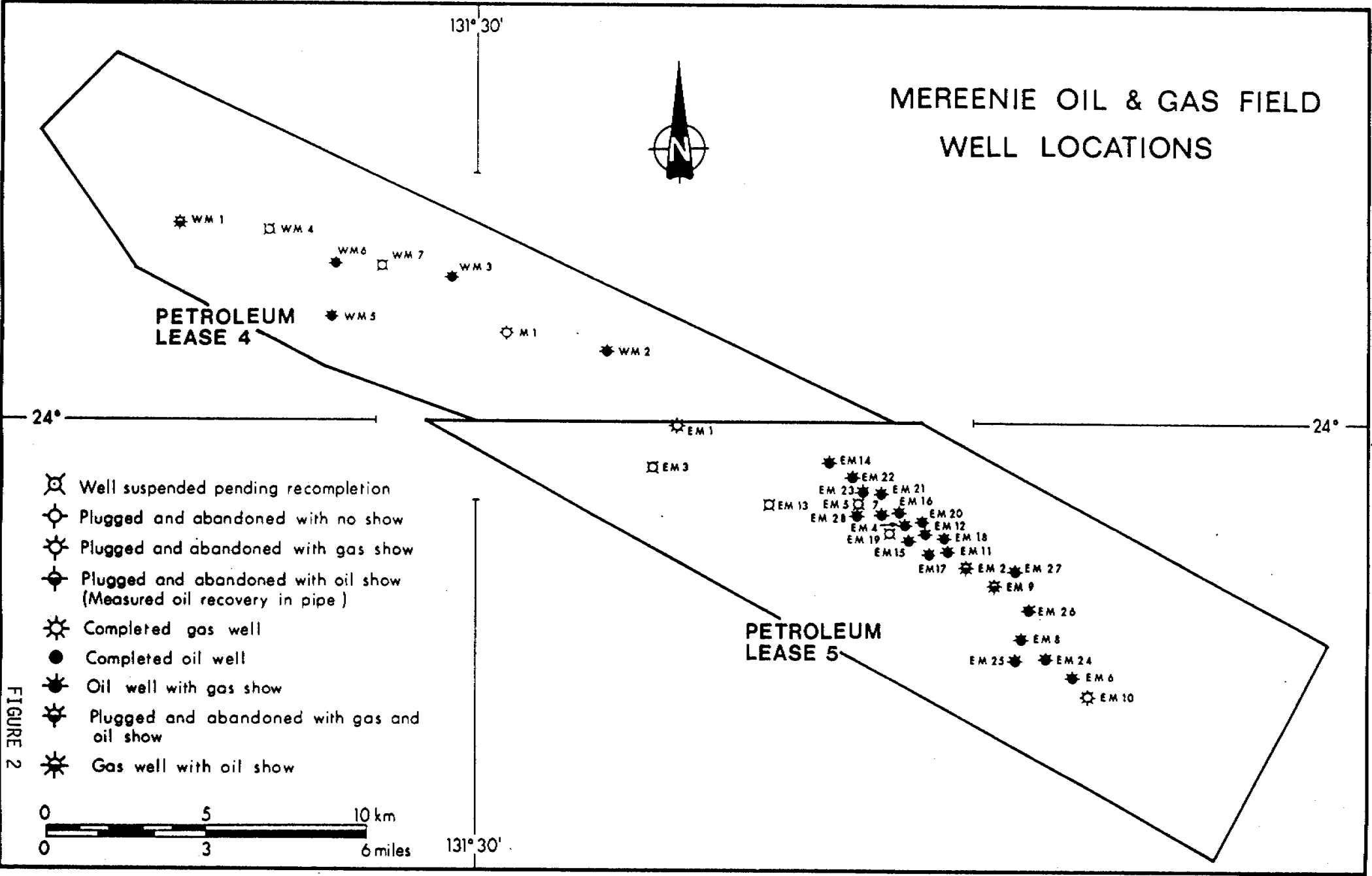
Well Name & Number: East Mereenie No. 25
Operator: Moonie Oil N.L.
Beneficial Interest Holders: The Moonie Oil Company Limited
 Flinders Petroleum N.L.
 Magellan Petroleum Australia Limited
Petroleum Title: Petroleum Lease No. 5
District: Alice Springs, Northern Territory
Location: Latitude: 24°04'02"S
 Longitude: 131°39'55"E
Elevation: Ground Level: 2353 ft
 Kelly Bushing: 2373 ft
Total Depth: 4940 ft - Driller
 4940 ft - Logger
Spudded: 7 November 1985
Rig Released: 20 April 1986
Total Days Drilling: 70 days
Well Status: Oil Production
Geological Formation Tops:

Parke Siltstone	20 ft KB
Mereenie Sandstone	864 ft
Carmichael Sandstone	2511 ft
Stokes Siltstone	2756 ft
Stairway Sandstone	3812 ft
Horn Valley Siltstone	4536 ft
Pacoota Sandstone	4757 ft



LOCATION MAP

MEREENIE OIL & GAS FIELD WELL LOCATIONS



- ⊗ Well suspended pending recompletion
- ⊙ Plugged and abandoned with no show
- ⊛ Plugged and abandoned with gas show
- ⊚ Plugged and abandoned with oil show (Measured oil recovery in pipe)
- ⊗ Completed gas well
- Completed oil well
- ⊛ Oil well with gas show
- ⊚ Plugged and abandoned with gas and oil show
- ⊛ Gas well with oil show

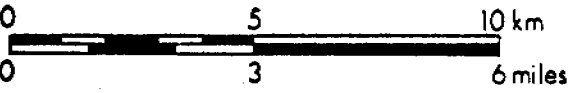


FIGURE 2
0436

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 psi with 1 x 3" positive and 1 x 3" adjustable choke

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

Diverter:	Make:	Grant
	Model:	70685
Injection pumps:(1)	Make:	Gardner Denver P.A.H.
	Model:	Triplex HP
	Capacity:	300 GPM
(2)	Make:	Gardner Denver PZ7
	Model:	PZ7 Triplex
	Capacity:	300 GPM

2.2 Drilling Record:

The following is a summary of relevant drilling activities on a day by day basis. Figure 3 is the annotated time/depth curve.

DATE	E.T.D (FT)	DETAILS OF OPERATIONS, DESCRIPTIONS AND RESULTS
7/11/85	54	Rig up, drill rat and mouse hole, drill 17-1/2" hole. Spudded 2030 hours.
8/11/85	150	Drill 17-1/2" hole to 150 ft, run conductor and cement. Nipple up blooey line with 60 sacks class A cement with 2% CaCl, shoe at 150 ft.
9/11/85	685	Make up BHA and drill 11" hole with mist.
10/11/85	1115	Drill 11" hole, change bit. (NB No. 3).
11/11/85	1720	Drill 11" hole with mist.
12/11/85	2084	Drill 11" hole with mist, change bit (NB No. 4).
13/11/85	2273	Drill 11" hole with mist.
14/11/85	2328	Drill 11" hole with mist, change bit (to No. 5), ream 120 ft, drill ahead.
15/11/85	2445	Drill 11" hole with mist, change bit (to No. 6), ream 25 ft, drill ahead with 11" hole.
16/11/85	2550	Drill 11" hole to 2510 ft, change to bit No. 7, drill ahead with 11" hole.
17/11/85	2930	Change to bit No. 8, ream from 2397 ft to 2530 ft, drill 11" hole.
18/11/85	3065	Drill 11" hole to 3065 ft. Nipple down rotating head and conductor, rig to run 8-5/8" casing.
19/11/85	3065	Run 8-5/8" casing, 82 joints of 32 lb/ft K55. Atlas Bradford casing. Cement with 161 sacks Class A with .2% HR-4. Run cement top job with 161 sacks of Class A cement with a cement basket at 175 ft. Nipple up BOPs, pressure test to 1000 psi. OK. RIH and install rotary head, tag plug @ 3023 ft. Drill out plug, shoe and 10 ft cement. Pressure test hydril and pipe rams. Drill out cement with water.

20/11/85	3767	Drill out cement with water. Drill 7-7/8" hole with water from 3065 to 3070 ft. Unload and dry hole. Drill 7-7/8" hole air dusting to 3767 ft.
21/11/85	3985	Drill 7-7/8" hole air dusting from 3767 ft to 3819 ft. POH. Make up bit No. 10 and alter BHA. RIH. Drill 7-7/8" hole air dusting to 3935 ft.
22/11/85	4148	Drill 7-7/8" hole air dusting from 3935 to 4148 ft. Lost 50,000 lbs water. Check water indicator. POH to shoe. RIH with sandline, obstruction @ 3100 ft. POH, lay out broken drill collar.
23/11/85	4148	Make up overshot and RIH. Tag fish @ 3598 ft. Unable to grapple. POH guide shoe damaged. Stand by on fishing equipment. Dress overshot with 6-1/2" grapple and RIH. Tag fish. Unable to grapple. POH. Stand by on fishing equipment
24/11/85	4148	Stand by on fishing equipment. Pick up spear and make up same. RIH. Tag fish. Work on fish and circulate air through fish. POH with fish in tow.
25/11/85	4328	POH with fish. Break out broken drill collar and fishing tools. Make up NB No. 11. RIH. Lay down 3 X 6-1/2" drill collars. RIH. Drill 7-7/8" hole air dusting 4148 to 4328 ft washing hole to recover cuttings. Bit won't drill @ 4328 ft. POH. NB reamer twisted off. Pick up and make up fishing gear. RIH.
26/11/85	4328	Fishing with overshot. Magnet picked up 3/4" of top of float.
27/11/85	4328	Fishing. Unable to latch fish.
28/11/85	4328	Fishing. Finally catch fish with taper thread spear. Lay out fish (1 bit, 1 junk sub and base of new bit reamer). Run magnet, retrieve small amount of steel. Breach out magnet and make up new bit.
29/11/84	4364	RIH with bit No. 12. Drill on junk. Drill 7-7/8" hole with air washing junk from 4328 to 4364 ft. POH. All 3 shanks missing from the bit. RIH with magnet. (Slight obstruction in 8-5/8" casing @ 259 ft). RIH with magnet.
30/11/85	4372	POH magnet and break out. Make up N.B. No. 13 and RIH. Drill on junk to 4372 ft, working junk sub. POH. Break out bit and junk sub. Mud up Bit No. 14 and RIH.

1/12/85	4372	Ream from 4290 to 4372 ft. Blow hole clean. Displace to oil based mud. Unable to get returns after pumping 245 bbls over annulus volume. Pump pill and POH to find mud level (approximately 251 ft). POH, break out bit and junk sub. Try to plug hole with LCM, unsuccessful.
2/12/85	4372	Try junk squeeze, no returns. Try further junk squeeze and sawdust plugs. No success. Pump goop etc, no success.
3/12/85	4372	Try further sawdust plugs and squeezing high hi-vis pills. No success.
4/12/85	4372	Tag plug @ 249 feet, push to 252 feet, unable to fill annulus, POH. Spot 1 drum sawdust and 5 bbls hi-vis pill. Tag plug @ 235 feet, push and drill to 250 feet, pressure up to 500 psi, POH. RIH, open-ended, attemp unsuccessfully to get sample. POH. RIH with bit and drill collars, push plug to 254 feet, unable to fill hole. Push plug to 270 feet, fill tanks with H2O, push and drill to 275 feet, break through, RIH to shoe., RIH, tag bottom, no fill. POH. Spot hi-vis pill @ 275 feet, POH. RIH to 250 feet, rig up Howco pump 10 bbls "Pol Mix 110-R", displace with 4 bbls H2O, wait 30 minutes, repeat 4 times to 0600 hours.
5/12/85	4372	POH, 20 ft Pol-mix on pipe. RIH to 283 feet, no bridge, fill annulus, losing 5.5 bbls/min, run 3 more Pol-mix slugs, fill annulus, wait 30 minutes. RIH to 250 feet, Run 3 "Pol-mix" slugs. POH, check pipe, RIH to 250 feet cement, plug No. 1 with Howco, annulus loss to 3.5 bbls/min. RIH to 315 ft, POH, RIH open ended to 4372 ft, pump 8 bbls crude, rig up to cement, mix 150 bbls oil base mud, run plug No. 1. POH to 3145 ft, run plug No. 2, POH. Make up bit and BHA. RIH to 2519 ft, wait on cement. RIH, tag plug @ 3024 ft, dress plug to 3026 ft, POH prior to nipple down.
6/12/85	4372	Lay down BHA, nipple down BOP. RIH and spot 15 bbls H2O, POH. Back out casing bowl, screw in landing joint, cut conductor away from 8-5/8" casing, pull 200,000 lbs on 8-5/8" casng, no go. Lay out BJ350, elevators and landing joint, install circulating head and valve, wait on 11-3/4" washover string.
7/12/85	4372	Wait on 11-3/4" washover string.
8/12/85	4372	Wait on 11-3/4" Washover string.

9/12/85 4372 Wait on 11-3/4" washover string. Clean measure and caliper all washover tools when they arrive. Wait on wash pipe extensions and elevators, make up 14" rotary shoe and washover tools. Shoe would not go over 8-5/8" collar, cut collar off and change to 12" rotary shoe. Washover 8-5/8" casing from 18 to 37 feet, attempt to fit 14" rotary shoe over 8-5/8" casing to 15" conductor - no go, washover with 12" shoe to 62 feet.

10/12/85 4372 Washover 8-5/8" casing to 77 ft, work stuck pipe(3026at 68 ft, pump out of hole with 50,000 lbs overpull and 12,000 psi, ream down to 77 ft, washover 8-5/8" to 88 ft, lay out 5 extension joints and RIH with 32 joint, washover to 109 ft, lay out extension joints & RIH with 27 joints, inspect shoe.

11/12/85 4372 Washover 8-5/8" casing to 119 ft, POH to inspect shoe, some joints damaged attempting to break connection, POH, no rotary shoe, lay out washover pipe, change damaged over-sub, make up casing cutter. RIH and cut 8-5/8" casing at 120 ft. POH, make up casing, spear jar on 8-5/8", no go, aly out spear and jars, pick up casing, cutter and cut casing @ 120 ft. RIH, latch onto 8-5/8" casing, POH. Lay out 102 ft, 8-5/8" casing, spear and jar. RIH with spear, latch onto shoe, could not pull free. POH, make up 14" shoe, ream hole out from surface to 116 ft.

12/12/85 4372 Make up 13-3/4" bit, RIH, circulate above fish and clean hole, POH. Make up 7-7/8" bit, RIH, wash around fish and down to 219 ft, ream to 229 ft. POH, wash again around fish, pick up spear with 11-3/4" grapple, latch onto 12" rotary shoe and jar free. POH, lay out fish, make 70 ft washover pipe and 14" rotary shoe. RIH, washover from 116 to 124 ft. POH, lay out 14" burn shoe, washover to 127 ft, blow hole clean, lay out drill pipe. Pick up drill collars for stabilization, RIH, washover 8-5/8" casing to 136 ft.

13/12/85 4372 Blow hole clean, POH, breakout, 11-3/4" shoe, make up 14", weld 4' of 15" pipe onto conductor, RIH, check torque on joints, ream from 124 ft to 136 ft. POH, inspect shoe, RIH, ream from 136 to 138 ft, POH, lay out 14" shoe, make up 11-3/4" shoe, RIH, washover 8-5/8" casing from 138 ft to 155 ft.

14/12/85 4372 Washover 8-5/8" casing with 11-3/4" shoe to 186 ft. POH, stand back washover pipe, RIH with 7-7/8" bit to clean casing to 252 ft, unable to enter casing, POH. RIH with 9-7/8" key seat wiper to clean top of casing, POH and RIH with bit to clean casing, unsuccessful, POH and RIH with 7-7/8" stabilizer and flat taper spear to 138 ft, try to clean out casing. POH. RIH with bit and stabilizer to 125 ft, unable to continue, POH, make up 7-7/8" grapple and jars, lay out same, fabricate taper milling tool, wait on same, RIH with taper mill and mill 8-5/8" casing to 120 ft.

15/12/85 4372 Make up taper mill and stabilizer. RIH, mill from 120 to 124 ft inside 8-5/8" casing. POH, lay out mill and RIH with 8-5/8" casing, spear to 155 ft, attempt to set grapple, latch onto 8-5/8" casing, no go. POH, casing spear grapple missing. Lay out drill collars and drill pipe, 2 stands at a time. Lay out washover pipe and handling gear. Weld plate over conductor pipe with elbowed vent hole. Rig released 0400 hours., Rig down.

23/1/86 4372
(3026 PBD) Rig up Mereenie OIME SL 750 Rig No. 1 over EM25.

24/1/86 Make up fishing assembly. RIH work casing swedge to 141 ft. POH, lay out fishing assembly No. 1. Make up fishing assembly No. 2. RIH to 125 feet unable to set casing spear. POH, check spear. RIH to 131 ft, unable to pick up on fish. POH. Make up casing swedge. RIH. Obstruction at 131 ft unable to pick up fish. POH. Make up fishing assembly No. 3. Make up inside milling assembly and washover assembly. RIH to 128 ft, use tapered mill on obstruction at 128 ft, work down to casing, grapple at 143 ft, won't mill. POH. Break out tapered mill. RIH with concave mill. Obstruction at 131 ft, mill to 139.5 ft. POH. Lay out concave mill and wash pipe.

25/1/86 Make up milling assembly 4. Mill over fish to 141 ft. POH to make connection. Add wash pipe and drill collar to assembly. RIH, mill from 131 ft to 135 ft, wash over to 142 ft. POH, make up tapered mill assembly. RIH to 137 ft. POH. Make up 8-5/8" casing spear assembly. RIH, latch on to casing at 137 ft, casing pulled free @ 117 ft. POH. Make up 7-5/8" bit and RIH, bump casing back to 121 ft. Enter casing and drive grapple 141 to 144.5 ft.

POH with 15.3 ft of casing around fishing assembly and lay out. Make up impression block and RIH. POH, no significant impression. Make up tapered mill and RIH to 143 ft, mill on fish.

- 26/1/86 Mill on fish from 145 to 161 ft, POH, RIH with tapered mill and N/R stabilizer. Tag at 146 ft mill and push obstruction from 146 to 166 ft. POH, make up spear and RIH, tag at 144 ft, POH. RIH with washover assy, unsuccessful, POH, make up mill and RIH and mill on obstruction from 142 to 149 ft, POH.
- 27/1/86 Make up mill shoe assy, RIH to 145 ft, mill on fish to 145 ft, POH. Make up taper tap assy and RIH to 166 ft, POH. Make up casing spear assy and RIH. Spear not functioning, POH and make up Bowen spear, RIH. Apparently sidetracking, POH, grapple damaged. Make up taper tap assy and RIH to 254 ft, POH. Make up casing spear and RIH, can't enter casing, POH. Check spear and RIH to 156 ft and engage - pull 75,000 and hold. Jar on spear, pulled free and POH. Spear had bypassed casing.
- 28/1/86 Make up taper tap assy and RIH to 260 ft, no obstruction, POH. Make up casing swedge and RIH to 157 ft, POH, make up taper tap under casing spear and RIH to 194 ft (outside fish). POH. RIH, with taper tap, enter fish, pick up 7-7/8" blade stabilizer, jars and drill pipe. RIH to 282 ft (outside fish), POH. RIH with taper tap slick to 281 ft (outside fish) layout drill pipe and tri-state tools. Prepare to suspend well.
- 29/1/86 Well suspended. Rig down, rig released 1200 hrs.
- 28/3/86 4372 Moved in and rigged up MJV Rig No. 1. POH tubing. Work poor boy fishing tool to unlatch from fish at 223 ft. POH. RIH open ended with 2-3/8" tubing. Blow hole clean with stiff foam. (Top of casing at 257 ft). Blow hole dry at 280 ft.
- 29/3/86 4372 POH 3 stands tubing. Make up 6 X 6-1/2" drill collars, 6 X HWDP and tri-state fishing assembly. RIH to 112 ft. Make up down hole camera and RIH. Work fishing assembly inside casing. Top of fish at 115 ft. Attempt to work fish free. POH casing spear. Run camera to 150 ft. Rig up and drill rat hole.

- 30/3/86 4372 Make up kelly drive bushings and kelly to swivel. Make up casing cutting assembly and RIH on HWP. Cut 8-5/8" casing at 180 ft. POH, lay out casing cutter and make up poor boy fishing tool. RIH. Latch onto fish at 153 ft and attempt to pull out casing. Not cut. POH with poor boy fishing tool. Make up casing cutter and RIH to 180 ft. Cut casing at 180 ft. Unable to unload hole. POH and layout tools. RIH with 2-3/8" tubing and unload hole. Blow hole dry. RIH with camera. POH. Pick up casing cutter and test. RIH and cut casing. POH and lay out casing cutter. Make up grappel and jars. RIH and latch onto fish. POH with fish. Lay out tools. RIH with tubing to 281 ft and flow hole dry. RIH with camera.
- 31/3/86 4372 RIH with magnet. Obstruction at 165 ft. POH. Nothing on magnet. RIH. Push obstruction to 178 ft. POH. Nothing on magnet. Change magnets. Continue to RIH with magnet. Make up poor boy finger basket and RIH. Latch on and bring junk to surface. Make up poor boy finger basket and RIH. Obstruction at 144 ft. POH and modify finger basket. RIH and latch onto junk. POH with junk. RIH with camera. POH. RIH with magnet (2 runs) - no success. RIH with finger basket. (4 runs). RIH with camera between runs. RIH with tubing and hook. RIH with camera. Pull on fish and move uphole. POH - no fish. RIH with finger basket. Latch onto and recover fish. Make up spear, bumper sub and jars. RIH, spear won't set. POH and service spear. RIH and set spear. Attempt to jar loose. Cannot move fish. Attempt to free casing spear.
- 1/4/86 4372 Attempt to free casing spear or fish by jarring. Jars not working. Attempt to free casing spear.
- 2/4/86 4372 Work stuck casing. Remove gooseneck. Rig up Gearhart. RIH with free point and CCL log. POH. Make up and RIH with backout log. POH. Rig down Gearhart. Lay out 1 X 6-1/2" drill collars. Replace goose neck. Pick up and make up wash over pipe. RIH to 138 ft.
- 3/4/86 4372 Washover fish with type "C" washover shoe 179 to 186 ft. POH. Breakout shoe and re-build. RIH. Washover fish 186 to 190 ft. POH and lay out shoe. Pick up and make up overshot and jars. RIH. Too big, POH and change grappel.

RIH. No fish. POH. Change grappel RIH. Too small. POH. Pick up spiral grappel. RIH. Too small. POH. RIH with tubing to 155 ft. Blow hole dry POH. RIH with camera. POH. RIH with spiral grappel. Latch onto fish. Free grappel.

- 4/4/86 4372 POH. Breakout jars and overshot. Pick up washover pipe and make up shoe. RIH to 190 ft. Washover fish with type "C" shoe 190 to 191 ft. POH. Re-build shoe and RIH. Washover fish 191 to 192.5 ft. POH, change to tooth type shoe and RIH. Washover fish 192.5 to 208 ft. POH and lay out shoe. Make up jars and overshot. RIH to 165 ft. Latch onto fish and POH. Retrieve 108 ft of fish. RIH with tubing and blow hole dry. RIH with camera.
- 5/4/86 4372 Make up poor boy finger basket and RIH to 256 ft. Work basket. POH and recover junk (4 trips). Repair basket between trips. RIH camera, POH. RIH with 2-3/8" tubing to 340 ft and unload hole, POH. RIH with camera. No junk evident, POH. RIH with casing cutter. Cut casing at 275 ft. POH, lay out cutter. RIH with spear and jars. Latch onto fish and POH. Lay out fish. Pick up casing dress mill. RIH and dress casing. POH and lay out mill. RIH with 2-3/8" tubing to 340 ft. Blow hole dry. POH. RIH with camera. POH. Rig to run 8-5/8" casing patch.
- 6/4/86 4372 Make up 8-5/8" lead seal casing patch. RIH with 7 joints casing. Set patch with 60,000 lbs o/pull. Fill string and pressure test to 1000 psi for 30 minutes. Cemented patched 8-5/8" casing, WOC. Weld casing bowl onto 8-5/8" casing and pressure test to 1000 psi for 15 mins. Nipple up BOP's and flow line.
- 7/4/86 4372 Nipple up BOP's. Pressure test blind rams, choke manifold, HCR, manual choke valve and kill line valve. Drill and install mouse hole. Rig up and run drill pipe with spiral finger basket. Obstruction at 378 ft. POH with junk. Make up new basket. Pick up drill collars and RIH to 383 ft. Obstruction. Work basket. POH with junk. Pick up 3 X 6-1/4" drill collar and RIH to 383 ft. Work junk basket. POH and lay out basket (7 trips).

- 8/4/86 4372 RIH with overshot basket. Work over fish and POH. Make up poor boy fishing basket and RIH. Work basket and POH. Make up taper tap and RIH to 413 ft. POH. Make up finger basket and RIH. Work basket. POH. Retrieve junk. Make up fingered overshot and RIH to 414 ft. Attempt to stir up junk. POH - no junk. Make up tapered spear and RIH. POH. Lay out spear. Pick up junk basket and RIH. Work on junk. POH. No junk. RIH to 414 ft with junk basket. Work on junk. Freed down to 551 ft. POH with junk. RIH to 1887 ft and strap drill pipe. RIH from 1887 to 2548 ft.
- 9/4/86 4372 RIH to 2891 ft. Circulate hole clean. Chase junk 2891 to 3030 ft. POH. Break out junk basket and make up poor boy. RIH to 3028 ft. Work finger basket down to 3033 ft. POH. No junk. Layout finger basket. Pick up junk basket and RIH. Work junk basket to 3035 ft. POH. No junk. Lay out junk basket. Make up bit and junk sub. RIH. Drill cement to 3050 ft (no junk). Pressure test casing to 500 psi. Circulate and work junk sub. POH. Dress roller reamer to 7-7/8".
- 10/4/86 4422 Casing scraps in junk sub. Make up new BHA with NB 17. RIH. Drill cement plug. Break through plug - well flowing. Circulate through poor boy de-gasser. Wash down to 3154 ft (bottom of plug). RIH to 4150 ft. Wash down to 4219 ft. Drilled bottom plug 4219 to 4372 ft. Drilled 7-7/8" hole with oil based mud to 4422 ft.
- 11/4/86 4522 Drilled 7-7/8" hole to 4454 ft. POH for bit change. Clean out junk sub. RIH with NB 18 and near bit reamer. Fill string at shoe. Drilled 7-7/8" hole with oil based mud to 4522 ft.
- 12/4/86 4643 Drilled 7-7/8" hole with oil based mud to 4643 ft.
- 13/4/86 4727 Drilled 7-7/8" hole to 4702 ft. POH to change bit. RIH NB 19. Reamed from 4670 to 4702 ft. Drilled 7-7/8" hole with oil based mud to 4727 ft.
- 14/4/86 4828 Drilled 7-7/8" hole with oil based mud to 4828 ft.
- 15/4/86 4849 Drilled 7-7/8" hole with oil based mud to 4849 ft. POH for DST No. 1. Make up test tools and RIH. Set packer and ran DST No. 1 over the interval 4819 to 4849 ft. (P1-80 sand).

Open tool initially for 23 mins and close for 46 mins.
 Open tool for final flow 160 mins and shut in for 361
 mins. GTS 5 mins. OTS 53 mins. Oil flowed at 416 BPD (48.6
 API) with gas at 288 Mcfd. GOR 692. Field chart readings :

IHP	IFP	ISIP	FFP	FSIP	FHP	BHT
2538	379	1703	565	1719	2527	141

- 16/4/86 4893 Reverse circulate, rig down test head and manifold. POH. Lay out test tools. RIH with NB 20 to 4849 ft. Drilled 7-7/8" hole to 4893 ft with oil based mud.
- 17/4/86 4940 Drilled 7-7/8" hole to 4940 ft (TD) with oil based mud. POH for wireline logging. Ran logs, RIH with bit RR 20.
- 18/4/86 4940 Circulate hole clean. POH laying down drill pipe, HWDP and drill collars. Rig to run casing. Ran 126 joints of 14 lb/ft, K55 5-1/2" casing with 10 X 5-1/2" centralizers and set shoe at 4938 ft. Nipple up to circulate and circulate casing.
- 19/4/86 4940 Cemented 5-1/2" casing with 234 sacks of Class "G" cement with 0.75% CFR-2 and 0.5% Hallad 22A. Displaced with 8.5 lb/gal brine. Nipple down BOP's. Nipple up "B" section and pressure test to 1000 psi for 15 mins. Rig to run tubing. Strap tubing and drill collars. Make up BHA and RIH picking up tubing. Tag cement at 4889 ft. Wash from 4889 to 4899 ft. POH tubing.
- 20/4/86 4940 POH 2-3/8" tubing. Lay out drill collars and casing scraper. Rig Gearhart and run CBL. Make up packer and perforating guns. RIH with 2-3/8" tubing. Rig up Gearhart. Wait on CCL tool. Nipple up Xmas Tree. Run CCL log. Drop bar and flow well. Well flowed 264 BOPD with 229.6 Mcfd gas over 1 hr on clean up flow test. East Mereenie No. 25 was completed as a P1 oil producer and the rig released at 2000 hrs.

EAST MEREENIE No. 25

TIME / DEPTH GRAPH

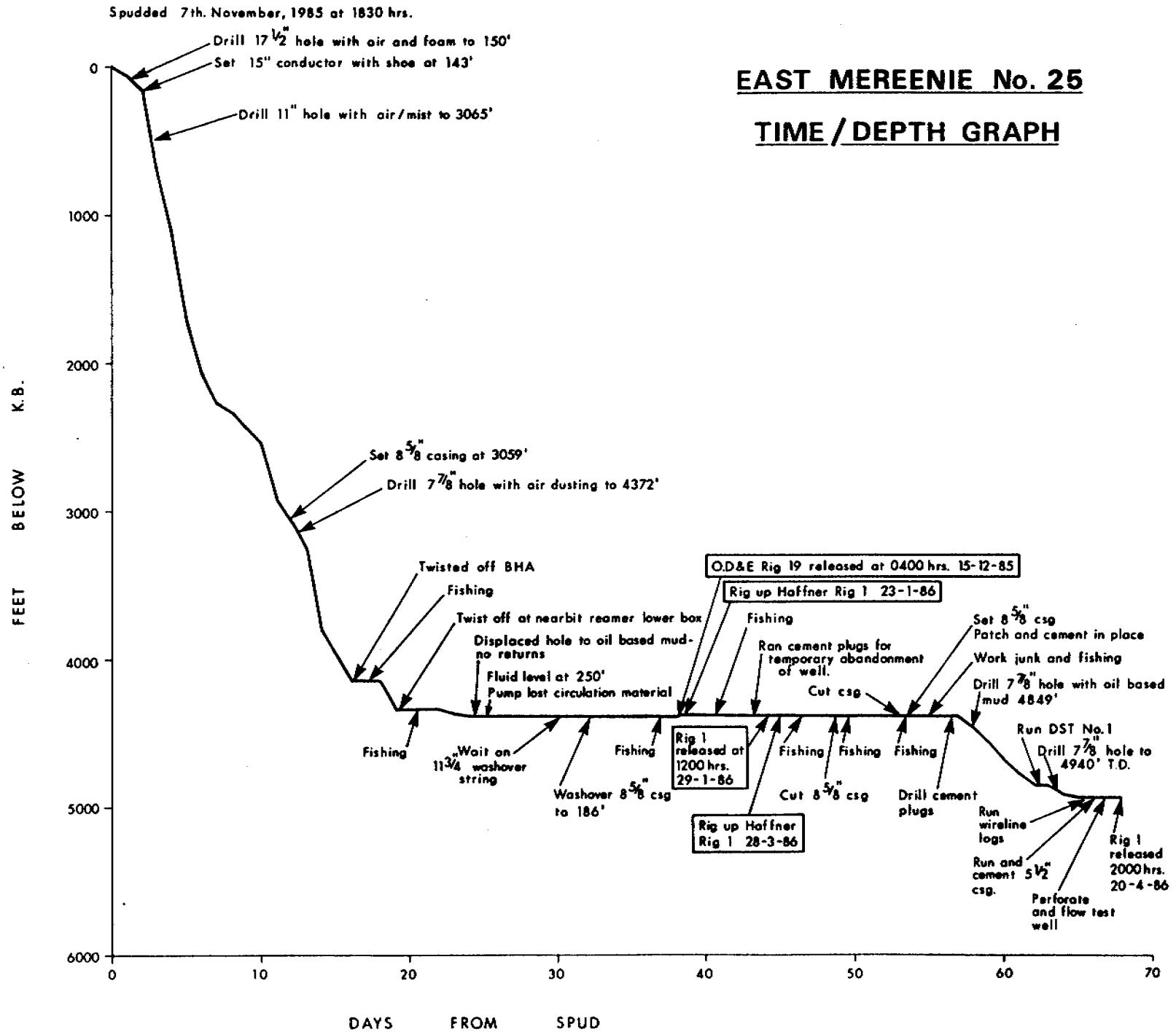
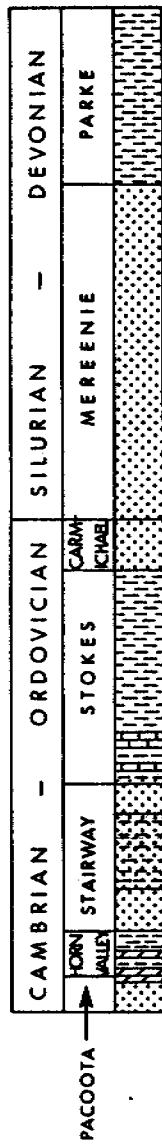


FIGURE 3

2.3 Hole Sizes and Depths:

17-1/2" to 150 ft (Rig 1A)

11" to 3065 ft (Rig 1A)

7-7/8" to 4940 ft T.D. (Rig 1)

2.4 Casing and Cementing Record:

15" conductor:	Weight:	1/4" Wall ERW
	Grade/ Connections:	1/4" Wall ERW/Welded
	Shoe Depth:	143 ft
	Cement Used:	60 sacks - Class A
	Additives:	2% CaCl
	Slurry Weight:	-
8-5/8" casing:	Weight:	32 lbs/ft
	Grade/ Connections:	K55/S T & C
	No. of Joints:	82
	Shoe Depth:	3059 ft
	Cement Used:	322 sacks Class A
	Additives:	0.2% HR4, 2% CaCl (Top Job)
	Slurry Weight:	15.5-15.8 lbs/gallon

5-1/2" casing:	Weight:	14 lbs/ft
	Grade/ Connections:	K55
	No. of Joints:	126
	Shoe Depth:	4938 ft
	Cement Used:	234 sacks - Class G
	Additives:	0.75% CFR-2, 0.5% Hallad 22A
	Slurry Weight:	15.2 lbs/gal
Plug No. 1:	Depth of Hole:	4372 ft
	Plug Interval:	4372 to 4212 ft
	Cement Used:	46 sacks Class "A"
	Additives:	0.2% HR-4
	Slurry Weight:	15.4 lbs/gal
Plug No. 2:	Depth of Hole:	4372 ft
	Plug Interval:	3145 to 3025 ft
	Cement Used:	46 sacks Class "A"
	Additives:	Nil
	Slurry Weight:	15.6 lbs/gal
8-5/8" Casing Patch:	Weight:	32 lbs/ft
	Grade/ Connections:	K55/ST&C
	Seal:	10" Tri-state Lead Seal
	Setting Depth:	275 ft
	Cement Used:	123 sacks Class "A"
	Additives:	2% CaCl
	Slurry Weight:	15.2 lbs/gal

DEPTH IN KB (FT)	DAYS FROM SPUD	FLUID TYPE	INJECTION ADDITIVE	INJECTION RATE (LBS/HR)	MUD WEIGHT (PPG)	FUNNEL VISCOSITY (SEC/QR)	PLASTIC VISCOSITY (CP)	YIELD POINT (LBS/100 FT ²)	CAKE THICKNESS (32ND OF IN)	GEL STRENGTH SEC MIN	WATER LOSS (CC)	OIL/WATER RATIO % - %	SOLIDS CONTENT %	SAND CONTENT %	P H	SALINITY X 1000 PPM	ELECT. STABILITY (VOLTS)	FLUID LOSS (-) OR GAIN (+) TO FORMATION + (BLS - HR)	FORMATION
54	1	AIR	FOAM	5															PARKE SILTSTONE
150	2	AIR	FOAM	5															PARKE SILTSTONE
685	3	AIR	FOAM	3															PARKE SILTSTONE
1115	4	AIR	FOAM	10															PARKE/U.MER SS
1720	5	AIR	FOAM	10															U.MEREEENIE SS
2084	6	AIR	FOAM	11															U.MER/MER QUARTZ
2273	7	AIR	FOAM	10															MEREENIE QUARTZITE
2388	8	AIR	FOAM	10														+ 900	MEREENIE QUARTZITE
2445	9	AIR	FOAM	11															MER QTZ/LWR MER
2550	10	AIR	FOAM	11															LWR MER/CARMICHAEL
2930	11	AIR	FOAM	10														+1000	CARM SS/UPP STOKES
3065	12	AIR	FOAM	10															U.STOKES SANDSTONE
3255	13	AIR																	U.STOKES SANDSTONE
3810	14	AIR																	U.STOKES/L.STOKES
3879	15	AIR																	U.STWY/MIDDLE STWY
4148	16	AIR																	MIDDLE STAIRWAY
4148	17	AIR																	MIDDLE STAIRWAY
4148	18	AIR																	MIDDLE STAIRWAY
4328	19	AIR																	MIDDLE STAIRWAY
4328	20	AIR																	MIDDLE STAIRWAY
4328	21	AIR																	MIDDLE STAIRWAY
4328	22	AIR																	MIDDLE STAIRWAY
4328	23	AIR																	MIDDLE STAIRWAY
4364	24	AIR																	LOWER STAIRWAY
4371	25	OMUD			10.2	58	35	26	1	6/10	3	70-15	15	TR		157	840	- 20.8	L.STAIRWAY NOT CIRC
4371	26	OMUD			10.2	58	35	26	1	6/10	3	70-15	15	TR		157	840	- 4.16	L.STAIRWAY NOT CIRC
4372	55	OMUD			8.3	43	12	16	1	3/4		78-22	9	TR			.88		FISHING
4372	56	OMUD			8.2	55	13	19	1	3/5		76-24	8	.25			.54		FISHING
4372	57	OMUD			8.7	55	24	19	1	4/6		73-27	8	TR			.56		FISHING
4372	58	OMUD			10.1	65	28	22	1	4/8		66-34	13	.25			.48		FISHING
4550	59	OMUD			9.9	55	26	24	1	5/8		70-30	12	.25			.48		L.STAIR/HORN VALLEY
4663	60	OMUD			9.9	55	27	23	1	5/8		71-29	14	.75			.48		HORN VALLEY
4757	61	OMUD			10.0	56	28	24	1	5/8		71-29	13	.75			.48		HORN VALLEY
4848	62	OMUD			10.0	57	27	24	1	5/8		72-28	13	1.25			.48		P1
4849	63	OMUD			10.0	58	28	26	1	6/9		73-27	14	1.0			.46		P1
4890	64	OMUD			10.0	59	31	23	1	5/8		73-27	14	1.0			.48		P1
4940	64	OMUD			10.1	61	28	24	1	4/8		73-27	14	1.0			.50		P1

EAST MEREENIE NO. 25 - DRILLING FLUID SUMMARY

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	HOB x 1000 LBS	RPH	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 WEIGHT (LBS/GAL)	VISCOSITY (SEC)	WATER LOSS (CC)	TEETH	BEARINGS	GAUGE (INS)				
0	1	RR1	17.5	HTC	DNVJ	-	-	-	174211	150	17.5	8.6	17.5	7	120	-	150	AIR													PARKE SILTSTONE
150	3	NB2	11.0	VAREL	V537	-	-	-	20770	922	22.0	35.1	39.5	5	60	1.5	200	AIR						2	4					IN	PARKE ST/MEREENIE SS
922	4	NB3	11.0	VAREL	V537	-	-	-	16135	2033	1111	46.5	23.9	25	80	0.75	500	AIR						0	0					IN	MEREENIE SANDSTONE
2033	6	NB4	11.0	VAREL	V537	-	-	-	15871	2285	252	31.5	8.0	35	70	0.75	500	AIR		35				0	0					IN	MER SS/MER QUARTZITE
2285	8	NB5	11.0	VAREL	V537	-	-	-	16339	2328	43	7.0	6.1	38	60	0.75	520	AIR						0	0					IN	MEREENIE QUARTZITE
2328	9	NB6	11.0	VAREL	V537	-	-	-	16648	2510	182	21.0	8.7	35	70	1.0	500	AIR		35				0	0					IN	MER QTZ/LWR MEREENIE
2510	10	NB7	11.0	VAREL	V537	-	-	-	15342	2550	40	1.5	26.7	25	100	1.0	550	AIR						0	0					IN	LWR MER/CARMICHAEL
2550	11	NB8	11.0	VAREL	V537	-	-	-	20774	3065	515	22.5	22.9	25	90	2.25	600	AIR						0	0					IN	CARM/UPP STOKES ST
3065	13	NB9	7.87	HTC	J22	-	-	-	WJ396	3819	754	28.0	26.9	12	90	4.0	150	AIR		35				0	0					IN	U. STOKES/L. STOKES
3819	15	NB10	7.87	HTC	J22	-	-	-	XX522	4148	329	25.0	13.2	17	90	6.5	175	AIR						0	0					IN	UPPER STWY/MIDDLE STWY
4148	18	NB11	7.87	HTC	J22	-	-	-	WX509	4328	180	6.5	27.7	15	90	7.5	175	AIR						0	0					IN	MIDDLE STAIRWAY
4328	22	NB12	7.87	HTC	J33	-	-	-	TS542	4364	36	8.0	4.5	25	70	7.5	150	AIR						0	0					IN	MID STWY/LOWER STWY
4364	24	NB13	7.87	HTC	J3	-	-	-	KX912	4371	8	1.5	5.3	15	70	7.5	150	AIR						0	0					IN	LOWER STAIRWAY
4371	25	NB14	7.87	HTC	J33	-	-	-	TS535	4371	0	0	0	0	-	7.5	500	AIR						0	0					IN	LOWER STAIRWAY
4371	27	NB15	7.87	HTC	J3	-	-	-	WP876	4371	0	0	0	0	-	7.5	500	AIR						0	0					IN	EM 25 TENP ABANDONED
4371	39	RR16	11	VAREL	V537	-	-	-	15342	4371	0	0	0	0	-	7.5	-	-						0	0					IN	LOWER STAIRWAY
4372	57	NB17	7.87	HTC	J44	16	16	16	VZ955	4454	82	16	5.1	258.3	40	70	7.5	1200	OBM	100		10.1	6.5							IN	LWR STWY/HORN VALLEY
4454	59	NB18	7.87	HTC	J44	16	16	16	ED310	4702	248	47.5	5.2	305.8	40	70	7.75	1000	OBM	90		9.9	5.5							IN	HORN VALLEY/PACOOKA P1
4702	61	NB19	7.87	HTC	J44	16	16	16	EC973	4849	147	34	4.3	339.8	40	70	7.75	850	OBM			10	5.7							IN	PACOOKA P1
4849	63	NB20	7.87	HTC	J44	16	16	16	FA228	4940	91	26	3.5	365.8	40	70	8	825	OBM		80		59							IN	

EAST MEREENIE NO. 25 BIT RECORD

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)
275	1	0.75	275	0.375	-	-	275	1.8	1.8
524	2	1.0	249	0.875	0.029	0.023	524	3.8	5.6
765	3	1.5	241	1.25	0.057	0.08	765	5.26	10.86
891	4	1.5	126	1.5	0.043	0.123	891	3.3	14.16
1082	5	1.0	191	1.25	0.045	0.168	1082	4.17	18.33
1333	6	1.25	251	1.125	0.048	0.216	1333	4.93	23.26
1648	7	0.75	315	1.0	0.048	0.264	1648	5.5	28.86
1994	8	0.75	346	0.75	0.03	0.294	1994	4.53	33.39
2255	9	0.75	261	0.75	0.22	0.316	2255	3.42	36.81
2491	10	1.0	236	0.875	0.027	0.343	2491	3.6	40.41
2843	11	2.0	352	1.5	0.12	0.463	2843	9.21	49.62
3032	12	2.5	189	2.25	0.146	0.609	3031	7.42	57.04
3277	13	3.25	245	2.87	0.308	0.917	3276	12.29	69.37
3316	14	3.5	39	3.38	0.068	0.985	3315	2.30	71.67
3568	15	4.75	252	4.13	0.654	1.639	3566	18.15	89.82
3749	16	4.0	181	4.375	0.527	2.166	3747	13.81	103.63
3906	17	4.5	157	4.25	0.432	2.598	3903	11.64	115.27
4095	18	6.0	189	5.25	0.793	3.391	4092	17.29	132.56
4320	19	7.5	225	6.75	1.559	4.95	4315	26.45	159.01
4371		7.5	51	7.5	.43	5.38	4365.5	6.65	165.66
4690	20	7.75	370	7.63	3.28	8.22	4682	49.13	208.1
4906	21	8.0	216	7.88	2.04	10.26	4896	29.61	237.7
4940	TD	8.04	34	8.02	.23	10.49	4930	4.7	242.4

EAST MEREENIE NO. 25

DEVIATION RECORD

2.8 Formation Testing:

One Drill Stem Test was run during the drilling of the well. A summary of the results is presented below with full details included as Appendix 2.

Drill Stem Test No. 1

Interval: 4819 to 4849 ft
 Date: 15/4/86
 Tester: Halliburton
 Formation: P1-80
 Test Type: Open hole - dual packer

Water cushion: Nil

Times:	First flow:	23 mins
	First shut-in:	47 mins
	Second flow:	160 mins
	Second shut-in:	366 mins

Bottom Bourdon Recorder Pressures (Field Results)

Initial hydrostatic:	2538.4 psig
First flow:	379.0 psig
Initial shut-in:	1703.4 psig
Second flow	565.8 psig
Second shut-in:	1719.2 psig
Final hydrostatic:	2527.8 psig

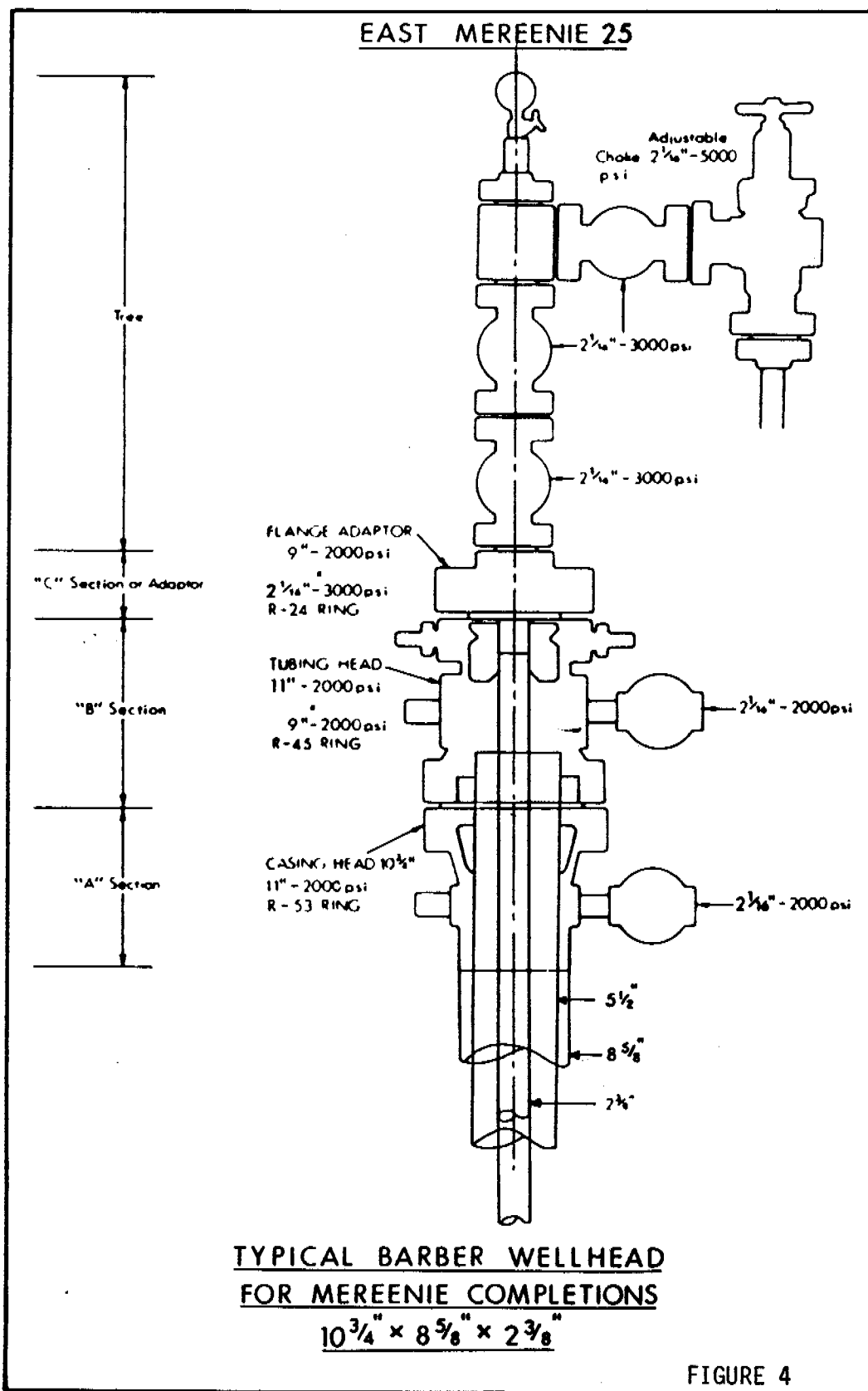
Results: Immediate weak to moderate blow. Increasing to strong after 1 minute and very strong after 2 minutes. Gas to surface 5 minutes. Maximum manifold pressure 42 psi after 9 minutes. Final Flow: immediate strong blow decreasing to weak after 20 minutes. Mud to surface 20 minutes. Oil to surface 53 minutes. Maximum manifold pressure 200 psi.

Conclusions: Charts indicate valid test of zone with good permeability.

2.9 Completion Data:

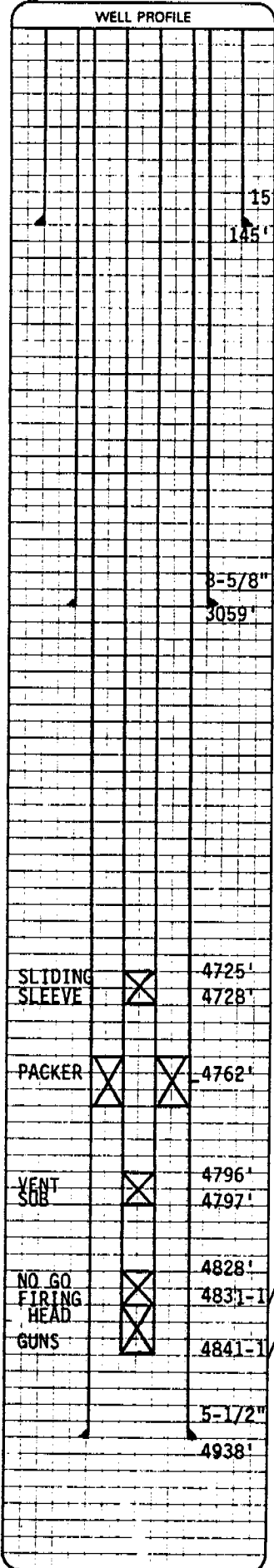
East Mereenie No. 25 was completed as a P1-80 oil production well through 2-3/8" tubing.

Refer to Figure 4, Well Head Diagram and Figure 5, Well Completion Summary for further details.



MOONIE OIL N.L. WELL COMPLETION SUMMARY

DATE: 20 4 86
DAY MONTH YEAR



WELL NAME: EAST MEREENIE NO. 25

WELL LOCATION: 24° 04' 02" S 131° 39' 55" E

K.B. ELEVATION: 2373 K.B. TO CASING FLGE: 18.20 K.B. TO TUBING FLGE: 17.00

	SIZE (O.D.)	WEIGHT	SET AT	TOP	INTERVAL DEPTH
CASING	8-5/8 ins	32#	3059		
CASING	5-1/2 ins	14#	4938		
PERFS.	4831-1/2 to 4841-1/2 feet				

DIAMETER OPEN HOLE:

TUBING: SIZE: 2-3/8 ins O.D. WEIGHT: 4.7# kg/m GRADE: J 55

TYPE/CLASS: EUE MAKE: N.K.K.

No. OF JOINTS ON LOCATION: 153 TALLIED LENGTH: 4790.80

No. of JOINTS PERMANENTLY IN WELL: 153 TALLIED LENGTH: 4790.80

FINAL TUBING STRING FROM BOTTOM UPWARD

DESCRIPTION	LENGTH		SET AT TOP	REMARKS
	ft			
TUBING HANGER	0	84		BARBER BPV
2-3/8" EUE PUPJOINT	10	10		
2-3/8" EUE PUPJOINT	0	73		
150 JTS 2-3/8" EUE TBG	4696	86		
SLIDING SLEEVE	2	83		OTIS XA
1 JT 2-3/8" EUE TBG	31	31		
PACKER	6	61		GUIBERSON VI
1 JT 2-3/8" EUE TBG	31	31		
SHATTER DISC VENT SUB	0	85		GEARHART
1 JT 2-3/8" EUE TBG	31	32		
NO GO FIRING HEAD	3	20		GEARHART
GUNS	10	00		BIG SHOT GUNS
TOTAL STRING LENGTH				4825 96
K.B. TO TUBING HANGER FLANGE (PLUS)				17 00
SETTING DEPTH K.B.				4842 96

TIME PIPE STARTED: 05.00

TIME ON BOTTOM: 09.00

CASING INTERNAL DEPTH BY TUBING: 4889 ft

WEIGHT OF TUBING STRING: 23,000 WEIGHT ON PACKER: 3,000 WEIGHT ON HANGER: 20,000

WELLHEAD: 2-1/16" W.P. 3000 MAKE: BARBER FLANGED/SCREWED-

MASTER VALVE... TYPE: GATE MAKE: BARTON SIZE: 2-1/6 ins

CASING VALVES... TYPE: GATE MAKE: BARTON SIZE: 2-1/6 ins

CHOKE: 2" TYPE: ADJ MAKE: BARBER

REMARKS (Note Additional Equipment): SELECTED PERFORATIONS AT 4833 TO 4843 FEET DUE FAILURE OF GAMMA RAY SONDE CORRELATION LOG RUN AFTER PERFORATING AND SHOWED SHOTS 1.4 FEET HIGH. INTERVAL PERFORATED WAS 4831-1/2 TO 4841-1/2 FEET.

COMPLETE IN DETAIL

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

R. 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:

See Stratigraphic Table (Table 4).

3.2 Formation Sampling:

(1) Ditch Cuttings :

Samples were taken at 30 ft intervals from 200 to 4530 ft with closer spaced sampling undertaken adjacent to predicted formation tops. From 4530 to 4940 ft (TD) samples were taken at 10 ft intervals.

Throughout the drilling operation two unwashed bagged samples were obtained for each sample interval. For each interval a washed and dried portion was produced from which a three-way sample split was made.

The sample were distributed as follows :

TMOC Resources Limited: 1 set washed & dried: 1 set
unwashed

Magellan: 1 set washed & dried

NT Dept of Mines: 1 set washed & dried: 1 set
unwashed

Sample Descriptions are presented in Appendix 1.

(2) Coring :

No cores were cut in East Mereenie No. 25

(3) Sidewall Coring :

No sidewall cores were taken.

3.3 Logging and Surveys :

1. Electric Logging :

The following logs were run using a Gearhart DDL logging unit.

<u>LOG</u>	<u>RUN</u>	<u>INTERVAL</u>	<u>DATE</u>
CNL/CDL/GR	1	3066-4939	17/4/86
DIL/GR	1	3900-4934	17/4/86
CBL	1	3400-4886	20/4/86
CCL/PERF	1		2/4/86
TCP CORRELATION	1		20/4/86

TABLE 4
EAST MEREENIE NO. 25 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		20	20	+2353	842	5	.91
MIDDLE DEVONIAN TO LATE SILURIAN	MEREENIE SANDSTONE		864	864	+1509	1643	5	.95
LATE ORDOVICIAN	CARMICHAEL SANDSTONE		2511	2511	- 138	245	5	1.4
MIDDLE ORDOVICIAN	STOKES SILTSTONE	UPPER	2756	2756	- 383	806	5	3.0
		LOWER	3562	3560	-1187	250	5	4.3
	STAIRWAY SANDSTONE	UPPER	3812	3810	-1437	130	5	4.4
		MIDDLE	3942	3939	-1566	402	5	6.3
		LOWER	4344	4339	-1966	192	5	7.6
EARLY ORDOVICIAN	HORN VALLEY SILTSTONE		4536	4529	-2156	221	5	7.7
EARLY ORDOVICIAN TO LATE CAMBRIAN	PACOOTA SANDSTONE	P1	4757	4748	-2375	183	5	7.9
		P2	-	-	-	-	-	-
		P3	-	-	-	-	-	-
		P4	-	-	-	-	-	-
LATE CAMBRIAN	GOYDER FORMATION		-	-	-	-	-	-
	TOTAL DEPTH		4940	4930	-2557			

Prints of all wireline logs are included as Enclosure 4.

2. Velocity Survey :

No velocity survey was run.

3. Penetration Rate and Gas Logs :

The penetration rate was recorded continuously from spud to total depth. Gas was monitored continuously by a conventional hotwire detector during the air dusting and mud drilling phase.

A mud log showing penetration rate, gas, lithological and other pertinent data was prepared at the well site on a daily basis and is included as Enclosure 2.

4. Deviation Survey :

Deviation surveys were taken at regular intervals during the drilling of the well. the drift and true vertical depth corrections are shown in Table 3.

5. Temperature Surveys :

Temperature surveys were not carried out, however the following temperatures were recorded :

141° F at 4849 ft; Halliburton

136° F at 4939 ft; Gearhart

3.4 Formation Dips :

A structural dip of approximately 6 degrees south southwest was prognosed for this well.

Based on formation tops as compared with surrounding wells, the figure of 5 degrees appears to be the true formation dip.

3.5 Formation Evaluation :

See Stairway and Pacoota Sandstone Sand Data Sheets. (Tables 5 and 6).

3.6 Relevance to Appraisal Programme :

East Mereenie No. 25 was completed as a oil production well through perforations in the P1-80 Reservoir horizon.

This well confirmed the continuation of the P1-80 reservoir along the southern flank of the Mereenie Anticline. The comparison of the gross and net sand thickness data with the surrounding wells shows there is the same thinning in reservoir thickness between East Mereenie No. 24 and East Mereenie No. 8 as between East Mereenie No. 24 and East Mereenie No. 25 (from 6 to 4 ft).

EAST MEREEINIE NO. 25 STAIRWAY SANDSTONE SAND DATA SHEET

TABLE 5

STRATIGRAPHIC CORRELATION		GROSS SAND GR ≤ 80 API		NET SAND ϕ CDL ≥ 4%				NET SAND ϕ CDL ≥ 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 ϕ	% MAX ϕ
<u>U. STAIR</u>											
US-10	3812-3840	3812-3814	2								
US-10	3812-3840	3817-3819	2								
US-10	3812-3840	3821-3827	6								
US-10	3812-3840	3831-3840	9								
US-40	3848-3852	3848-3852	4	3848-3850	2	5.0	5.5				
US-80	3860-3884	3881-3884	3								
US-100	3890-3942	3890-3902	12	3898-3900	2	5.0	6.0	3929-3937	8	10.0	11.0
US-100	3890-3942	3905-3933	28	3909-3914	5	5.5	6.0	3938-3942	4	7.5	8.0
US-100	3890-3942	3937-3942	5	3928-3942	14	8.5	11.0				
			71		23				12		
<u>M. STWY</u>											
MISC	3942-3951	3942-3944	2	3942-3951	9	7.0	8.0	3942-3950	8	7.0	8.0
MISC	3967-3972			3967-3972	5	5.0	6.0				
			2		14				8		
<u>L. STWY</u>											
LS-10	4344-4356	4352-4356	4								
LS-50	4376-4396	4376-4386	10	4379-4385	6	8.0	10.0	4380-4385	5	9.0	10.0
LS-50	4376-4396	4392-4396	4								
LS-80	4405-4424										
LS-150	4464-4469	4464-4469	5								
LS-160	4478-4536	4478-4512	34	4479-4484	5	5.0	5.5				
LS-160	4478-4536	4514-4536	22	4491-4496	5	5.5	6.5				
			79		16				5		
STAIRWAY SANDSTONE TOTAL			152		53				25		

EAST MEREENIE NO. 25 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 ϕ	% MAX ϕ
P1											
P1-40	4801-4814	4801-4804	3	4801-4808	7	6.0	7.5	4801-4807	6	6.5	7.5
P1-40	4801-4814			4812-4814	2	5.0	6.0				
P1-80	4835-4842	4835-4842	7	4835-4842	7	7.5	10.5	4835-4839	4	9.5	10.5
MISC	4854-4856			4854-4856	2	5.0	5.5				
P1-110	4856-4864	4856-4864	8								
P1-120	4870-4878	4870-4875	5								
P1-140	4898-4901	4898-4901	3								
			26		18				10		
PACOOTA SANDSTONE TOTAL			26		18				10		