

# SUMMARY OF POROUS ZONES

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## DST #5: 12,956'-13,044' Morrow

Opn w/weak blow, increased to btm of bucket in 3 mins, continued increasing for remainder of 15 min init. flow; opn on final flow w/weak blow; inc. to good blow in 5 mins; stabilized for 40 mins & decreased slowly for remaining 15 mins of test.  
Rec. in drill pipe, 3000' water blanket, 5117' salty formation water. Chlorides:  
Top 42,000 ppm, Middle: 40,000 ppm, Btm: 40,000 ppm. Sampler: 3600#, no oil or gas, 1300 cc formatino water. Chlorides 40,000 ppm.

IHP	6535#
IFP	2004-2103# (15 mins)
ISIP	6620# (60 mins)
FFP	2696-3921# (60 mins)
FSIP	6208# (120 mins)
FHP	6835#

## DST #6: 13,086'-13,308' Morrow sand

Ran 3080' water blanket, tool opn on 15 min pre flow w/weak blow, SI 60 mins; re-opn w/weak blow, died in 38 mins and remained dead for remainder of 60 mins. Rec. 3080' water blanket, 60' drlg mud, slightly gas cut. Sampler chamber: 1930 psi, 1.62 cf gas, 1950 cc slightly gas cut mud.

IFP	1622-1622# (15 mins)
ISIP	4630# (60 mins)
FFP	1622-1656# (60 mins)
FSIP	4422# (120 mins)
IHP	6957#
FHP	6904#
BHT	176°

## DST #7: 13,326-13,600' Morrow sand

15 min pre flow, 60 min ISIP, 275 mins final flow, no FSIP due to pkr failure 275 mins into final flow. Opn w/strong blow on init. flow, opn w/strong blow on final flow, burned to pit on 1/2" choke, wtr blanket to surf. in 14 mins into final flow. GTS in 29 mins, 500# max. surf. press, 13.5 MMCF stabilized at 275#; 225 mins into final flow 7.3 MMCF. Rec. 50' distillate in drill pipe.

IFP	2861-2526#
ISIP	6672#
FFP	2784-1881#
FSIP	none - pkr failure
Hydro - in	7144
Hydro - out	7119

PREP TO RUN DST #8 AT SAME INTERVAL IN ORDER TO OBTAIN FSIP.

SUMMARY OF POROUS ZONES

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DST #8: 13,326'-13,600' Morrow sand

IHP 7168#

IFP 2655# (15 mins)

ISIP 6672# (60 mins)

FHP 7069#

FFP 2809 increased to 2861# when packer failed. Reversed out pure distillate for 5 to 6 mins. Presently making trip in hole w/bit to drill out pkr rubbers. Depth 13,600', Logging.

Picked up test tool, run 3316' water blanket and trip in hole, ran DST #8, packer failed 14 mins on final flow, water blanket to surface at this time, flow down test tool, pull 10 stands and reverse out, laid down test tool, break and load out, trip in hole with bit.



FORSTER DRILLING CO., INC.

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MIDLAND, TEXAS 79702

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563-0221

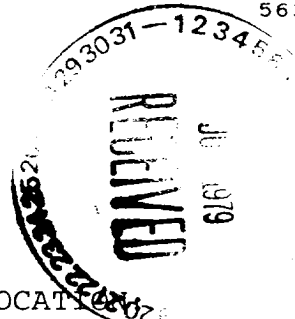
INCLINATION REPORT

OPERATOR:

Estoril Producing Corporation  
1120 Vaughn Building  
Midland, Texas 79701

LOCATION:

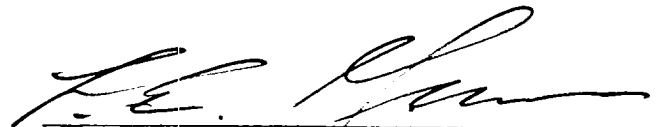
Union Federal No. 1  
Lea County, New Mexico



DEPTH FEET	INCLINATION DEGREES	DEPTH FEET	INCLINATION DEGREES	DEPTH FEET	INCLINATION DEGREES
150	3/4	7,215	1 1/4		
300	1/2	7,660	3/4		
458	1/2	8,160	1		
665	1/4	8,660	1		
853	1/4	8,991	1 1/4		
1,345	3/4	9,491	3/4		
1,696	1	9,660	3/4		
1,994	3/4	10,160	3/4		
2,470	3/4	10,660	3/4		
2,968	2	10,983	3/4		
3,323	2 1/4	11,483	1		
3,823	2	11,983	1 3/4		
4,323	2	12,362	1 3/4		
4,823	2	12,710	1 3/4		
5,215	2	13,210	2		
5,715	1 1/2	13,377	2 3/4		
6,215	1 1/2	13,600	2 1/4		
6,715	1 1/2				

COUNTY OF MIDLAND  
STATE OF TEXAS

The undersigned states that he has knowledge of the facts and matter herein set forth and that the same are true and correct.

  
L.E. Grimes, Vice President

SUBSCRIBED AND SWORN TO BEFORE ME THIS 7th DAY OF June 1979

  
Notary Public

My Commission Expires: March 7, 1980