

Tom L. Ingram
1 State 'M'
Straight Hole
DST

DST # 1 - 8778-8858. Open 2 hours 20 min. Recovered 930' mud + 558' water cut mud + 651' mud. Sample Chamber:

HI	4358	IF	475
IPF	356	FF	950
FPF	427	120''FSIP	2350
60'' ISIP	2350	H0	4358

DST # 2 - 8852-8913. Tool open 3 hours 20 min. Rec. 186' Water cut mud + 1480' Slightly gas cut salty sulphur water

HI	4454	IF	259
IF	58	FF	773
FF	259	120''FSIP	2309
60'' ISIP	2337	H0	4454

BHT 138°.

DST# 3 - 8914-8965. Open 1 hour 20 min. Weak blow for 42 min. Died. Recovered 467' slightly water cut mud + 850 cc slightly water cut mud.

HI	4510	IF	106
IF	65	FF	256
60''ICIP	2006?	60''FCIP	1857?
FF	106	H0	4510

(Pressure gauge appears to be faulty)
BHT 141°.

MISRUN: Both close in pressures missed.

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Whipstock Operation
DST

Note: Drillstem tests one, two and three were on the straight hole.
The Following DST's are in the Directional Hole:

DST #4 - 8881' - 8990'. 17 minute pre-flow. Open 2 hours. Gas to surface in 28 minutes. 36 MCFGPD. Recovered 290' oil, 42 gravity at 78 degrees, plus 660' oil & gas cut mud. In sampler:

HI 4427	120" FFP 234-328
17" IFP 164-234	121" FSIP 1472
60" ISIP 1588	HO 4427

Bottom hole temperature 132°.

DST #5 - 8969' - 9037'. 23 minute pre-flow. Gas to surface in 48 minutes. 25 MCFGPD. Open 3 hours. Recovered 93' oil; 186' mud cut oil; 93' oil cut mud; 372' slightly oil and mud cut water; 1116' formation water. In sampler:

HI 4474	FFP 285-760
IFP 95 - 273	180" FSIP 2165
120" ISIP 2165	HO 4429

DST #6 - 8884' - 9009'. (Straddle test) 45 minute pre-flow. Open 3 hours. Gas to surface in 10 minutes. 23½ MCFGPD. Recovered 279' (3.6 Bbl.) oil, 38.6 gravity at 60 degrees; 93' (1.2 Bbl.) mud cut oil; 186' (2.4 Bbl.) slightly oil cut mud; 729' (5.8 Bbl.) formation water. In sampler:

HI 4404	180" FFP 259-533
45" IFP 118-222	240" FSIP 2091
120" ISIP 2090	HO 4404

Bottom hole temperature 133°.

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Cores

Core # 1 from 8858-8914. Recovered 56' dolomite with scattered porosity & stain:

- 2' buff medium crystalline dolomite with good porosity & stain
- 1' buff slightly shaly dolomite with scattered porosity & stain
- 3' buff medium crystalline dolomite with scattered porosity & good stain
- 2' dolomite with good porosity and stain
- 2' dolomite with scattered fractures and vuggy porosity with scattered staining
- 2' dolomite with good pinpoint porosity (vuggy) and good staining
- 5' dolomite with scattered porosity and stain
- 2' dolomite with good porosity and stain
- 2' dolomite with scattered porosity and stain
- 2' dense dolomite
- 5' dolomite with scattered porosity and stain
- 1' dense dolomite
- 3' dolomite with scattered porosity
- 1' dense dolomite
- 1' dolomite scattered porosity and stain
- 4' dense anhydritic dolomite
- 1' dolomite with scattered porosity and stain
- 3' dolomite with scattered porosity
- 2' dense anhydritic dolomite
- 1' dolomite with scattered porosity and stain
- 2' dolomite with good porosity and stain
- 1' dolomite with scattered porosity and stain
- 2' dense anhydritic dolomite
- 2' dolomite with scattered porosity
- 2' dense anhydritic dolomite
- 2' dense dolomite

Core #2 from 8914-8952. Recovered 38' dolomite with anhydrite streaks and trace of staining in bottom.

- 1' buff medium crystalline dolomite
- 2' dolomite with pinpoint porosity and scattered stain
- 2' dense dolomite
- 1' anhydrite
- 2' dense dolomite
- 1' medium crystalline dolomite with trace of porosity
- 2' shaley dolomite
- 3' dolomite with scattered porosity and fractures
- 1' anhydrite
- 2' shaley dolomite
- 1' medium crystalline dolomite with scattered pinpoint porosity
- 1' anhydrite
- 4' dense dolomite
- 1' anhydrite
- 2' dense dolomite
- 2' anhydrite
- 1' medium crystalline dolomite with trace of fractures and porosity
- 2' dense dolomite
- 1' anhydrite
- 1' dense dolomite
- 1' anhydrite
- 1' dolomite with fractured porosity and trace of staining

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Cores

- 2' dense dolomite
- 1' dolomite with fractured porosity and trace of staining

Core # 3 from 8952-8965. Recovered 13' dolomite with scattered to good porosity and some staining in bottom 8 feet

- 1' buff anhydritic dolomite
- 3' medium to coarse crystalline dense dolomite
- 2' medium crystalline dolomite with good pinpoint fractured porosity and stain
- 1' dolomite with scattered pinpoint porosity and stain
- 2' dolomite with good pinpoint porosity and stain
- 3' dolomite with scattered pinpoint porosity

WELL NAME AND NUMBER _____ STATE "M" #1 _____

LOCATION 330/S 1650/E Section 18, T17S, R36E, Lea County, New Mexico
(New Mexico give U.S.T&R: TEXAS GIVE S,BLK,SURV.& TWP)


OPERATOR Tom L. Ingram

DRILLING CONTRACTOR Moran Oil Producing & Drilling Corp.

The undersigned hereby certifies that he is an authorized representative of the drilling contractor who drilled the above-described well and that he has conducted deviation tests and obtained the following results:

Degrees @ Depth	Degrees @ Depth	Degrees @ Depth	Degrees @ Depth
<u>1/2 159</u>	<u>1 4957</u>	_____	_____
<u>3/4 313</u>	<u>1 5443</u>	_____	_____
<u>3/4 794</u>	<u>1 1/4 5990</u>	_____	_____
<u>1/2 1294</u>	<u>1 1/4 6462</u>	_____	_____
<u>3/4 1777</u>	<u>1 6933</u>	_____	_____
<u>1/2 2185</u>	<u>1 1/4 7433</u>	_____	_____
<u>3/4 2688</u>	<u>1 1/2 7886</u>	_____	_____
<u>3/4 3087</u>	<u>1 3/4 8093</u>	_____	_____
<u>1 3299</u>	<u>1/2 8482</u>	_____	_____
<u>1 3406</u>	<u>1 3/4 8730</u>	_____	_____
<u>3/4 3901</u>	<u>2 8858</u>	_____	_____
<u>1/2 4250</u>	<u>2 8965</u>	_____	_____
<u>1 1/4 4624</u>	_____	_____	_____

Drilling Contractor MORAN OIL PRODUCING & DRILLING CORP.

By 
K. D. McPeters, Vice President

Subscribed and sworn to before me this 22nd day of June, 19 71

My Commission expires:
April 1, 1974


Notary Public
Lea County, New Mexico

SPERRY-SUN WELL SURVEYING COMPANY

CHARLES E. HAWK
PRESIDENT

P. O. Box 2133
Odessa, Texas
August 6, 1971

JOS. T. WILSON, JR.
SECRETARY-TREASURER

Tom L. Ingram
P. O. Box 1757
Roswell, New Mexico

Gentlemen:

The enclosed film and ten folders show the results of our Gyroscopic survey No. SM1.75-6040, Magnetic Multishot survey No. MS-6041 run on July 20, 1971 from surface to a depth of 7281 feet; and Magnetic Multishot survey No. MS-6048 run on August 5, 1971 from 7281 feet to 9037 feet. These surveys were performed on the State "M" lease Well No. 1, in the Vacuum Abo Reef field, Lea County, New Mexico.

One of these folders contains the original of the computation sheets, field data sheets, horizontal Projection and certification. Bottom hole location has been plotted in relation to the surface location on the certified plat furnished by you and copies of same have been included in all folders.

All copies have been certified and a copy is being sent by registered mail to the New Mexico Oil Conservation Commission, Box 2088, Santa Fe, New Mexico; Franklin, Aston and Fair box 1090, Roswell, New Mexico; Yates Drilling Company, 207 Fourth Street, Artesia, New Mexico; J. M. Huber Corporation, 1900 Wilco Bldg., Midland, Texas; and Gulf Oil Company, Mr. Lester Marshall, box 1938, Roswell, New Mexico.

It has been a pleasure to perform this service for you.

Very truly yours,

SPERRY-SUN WELL SURVEYING COMPANY

Benji Lipsey

Benji Lipsey
Directional Survey Tech.

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Enclosures

cc: New Mexico Oil Conservation Commission- Santa Fe w/encl. Aston, Franklin, and Fair w/encl.; Yates Drilling Company w/encl.; J.M. Huber Corporation w/encl.; and Gulf Oil Company Mr. Lester Marshall w/encl.
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