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RECEIVED

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COLORADO OIL & GAS CORP. COMPANY

GEOLOGICAL REPORT

KOCH EXPLORATION COMPANY

SOUTH BEVERLY RIDGE #1

C-SW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 6, T 3 S, R 50 West

WASHINGTON COUNTY, COLORADO

WELL: South Beverly Ridge #1

LOCATION: C-SW¹/₄NE¹/₄ Section 6, T 3 S, R 50 W
Washington County, Colorado

OPERATOR: Koch Exploration Company

CONTRACTOR: Exeter Drilling & Exploration Co.

ELEVATIONS: 4557' G.L. 4566' K.B.

CASING: Set 8-5/8" @ 295'; 305' K.B. Cemented with 210 sacks cement, 3% CaCl₂. Plug down 3:30 P.M.

| | |
|-----|---|
| DVR | |
| FJP | |
| HHM | ✓ |
| JAM | ✓ |
| JJD | ✓ |

WELL HISTORY: 9-16-72 Spud 12:00 noon. Set surface casing.
9-17-72 Drilling at 2306'
9-18-72 Drilling at 4000'
9-19-72 Pulling Drill Stem Test #1. P & A

CORES: None

DRILL STEM TESTS: DST #1 run after reaching TD and logging. Log depths used. Straddle test; "D" Sand 3912' - 3920'. Tool open 10", shut in 45", open 15", shut in 90". Tool opened with weak blow, decreased to very weak in 10", reopened with a very weak blow which died in 8". No recovery in drill pipe, tool was plugged with heavy mud.

Initial hydrostatic pressure 2305#
Final hydrostatic pressure 2065#
Initial shut in pressure 830#
Final shut in pressure 813#
No flow pressures were read in the field.

The chart indicated plugging of the tool and the test was deemed a misrun.

LOGS: Schlumberger I-ES; Compensated Formation Density Log

LOG FORMATION TOPS:

| <u>Formation</u> | <u>Electric Log</u> | <u>Subsea</u> |
|------------------|---------------------|---------------|
| Niobrara | 2976 | |
| Carlile | 3490 | |
| Greenhorn | 3620 | |
| Bentonite | 3814 | |
| "D" Sand | 3904 | (+662) |
| "J" Sand | 3961 | (+605) |
| TD | 4053 Log | |
| | 4054 Driller | |

MUD:

On the morning of 9-18-72, the mud had the following properties:

| | |
|-------------|---------------|
| Weight | 9.9 #/gal. |
| Viscosity | 57 API funnel |
| Water Loss | 4.7 |
| Filter Cake | 2/32 |

| BIT RECORD: | No. | Size | Make | Type | Depth Out | Feet | Hours |
|-------------|-----|--------|------|------|-----------|------|-------|
| | 1 | 7-7/8" | STC | DT | 3430 | 3120 | 19 |
| | 2 | 7-7/8 | STC | DT | 4054 | 624 | 15 |

| DEVIATION SURVEYS: | Depth | Degrees from Vertical |
|--------------------|-------|-----------------------|
| | 1463 | 1/2 |
| | 2000 | 1 |
| | 2806 | 1-3/4 |
| | 3430 | 1-1/2 |

SAMPLE DESCRIPTION: Log Depths used:

3850 - 3904 Shale, black, soft.

3904 - 3906 Sandstone, fine grained, gray, subangular, fair porosity, slight clay matrix, friable, light tan oil stain, bright yellow fluorescence, bright yellow streaming ether cut fluorescence.

3906 - 3930 Sandstone, fine grained to very fine grained, gray to buff, silty, clay filled, mostly very low porosity, some fair porosity, sub rounded, friable, wet, no shows, no fluorescence.

3930 - 3934 Shale, tan, black.

3934 - 3943 Sandstone, very fine grained, tan, very heavily clay filled, wet, no shows, no fluorescence.

3943 - 3961 Shale, tan, black.

3961 - 3993 Sandstone, gray to white, fine grained, clay filled and low porosity with some streaks of fair porosity toward base of zone, friable, sub rounded, few specks of black shale and glauconite inclusions, wet, no shows, no fluorescence.

3993 - 3999 Shale, black, tan.

3999 - 4004 Sandstone, fine grained, gray to white, clay filled and silty, tight, no shows, no fluorescence.

4004 - 4008 Shale, black, tan.

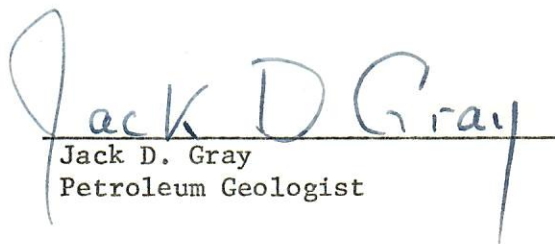
4008 - 4054 Sandstone, fine grained, white, clay filled to clean, friable where clean, poor to very good

porosity, few glauconite specks, sub rounded, wet, no shows, no fluorescence, few thin black shale beds.

DISCUSSION:

The only sample shows encountered in the well were in the very top of the "D" Sand section, where there appeared to be a very thin zone of oil saturated sand. When the logs were run, there was no indication of this oil sand at the top of the "D" as I had anticipated, but there was a very anomalous porosity streak with a corresponding resistivity peak about 10' into the "D" Sand. It was this log anomaly which was the object of the attempted drill stem test. Schlumberger suggested that the zone in question could be a coal streak, and this is very possible, although no coal was noted in the samples. Upon reviewing the sample description, it does not appear probable to me that the log anomaly could correspond to the shows noted in the samples.

The well was plugged and abandoned without further testing by plugging the base and top of the surface pipe in accordance with instructions received from the Colorado Oil and Gas Conservation Commission by Mr. Fisher, the Exeter tool pusher.


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