

RECEIVED
MAY 15 1981

DATE 4-17-81 Ticket Number 830
Kind of Job DST Straight Test
Tester T. Michel Witness B. Durr
Drilling Contractor Toltek Drlg.

EQUIPMENT & HOLE DATA

Formation Tested D Sand
Elevation 4558
Net Productive Interval 12
All Depths Measured From KB
Total Depth 4906
Main Hole/Casing Size 7 7/8
Drill Collar Length 512 I.D. 2.25
Drill Pipe Length 4331 I.D. 3.826
Packer Depth(s) 4876-4882
Depth Tester Valve 4861

FLUID SAMPLE DATA

Pressure 0 PSIG at Surface
Recovery Cu Ft Gas
Oil 1600
Water 200
Mud 1800
Tot Liquid cc
Gravity ° API @ °F
Gas/Oil Ratio cu. ft./bbl
RESISTIVITY CHLORIDE CONTENT
Recovery Water 1.50 @ 67 °F 5,000 ppm
Recovery Mud @ °F ppm
Recovery Mud Filtrate @ °F ppm
Mud Pit Sample @ °F ppm
Mud Pit Sample Filtrate 2.50 @ 50 °F 2,500 ppm
Mud Weight 9.8 vis 54 cp

Cushion	TYPE	AMOUNT	Depth Back Pres. Valve	Surface Choke	Bottom Choke
Recovered 10	Feet of	Mud		3/8	3/4
Recovered 110	Feet of	Muddy water			
Recovered 120	Feet of	Water R.W. 1.50 @ 64° - 5,000 ppm			
Recovered	Feet of				

Open tool for a 30 min. Initial Flow with a weak blow increasing to 4 in. in bucket at the end of the 30 min. period. Initial Shut-in 30 min. Open tool for a 60 min. Final Flow with a weak blow increasing to 4 in. in bucket at the end of the Final Flow period. Final Shut-in 60 min.

TEMPERATURE	Gauge No.	Gauge No.	Gauge No.	TIME
Est °F	Depth Ft	Depth Ft	Depth Ft	Tool
	11083	11082	11082	Opened 4:00 P.M.
	4858	4903	4903	Opened 7:00 P.M.
	Hour Clock	Hour Clock	Hour Clock	Bypass
	Blanked Off	Blanked Off	Blanked Off	Reported
Actual 123 °F	Pressures	Pressures	Pressures	Computed
	Field	Office	Field	Minutes
Initial Hydrostatic				Minutes
Initial				30
Final				30
Closed in				
Initial				60
Flow				60
Final				
Closed in				
Final Hydrostatic				

Real Estate Inv.

Well No.

Test No.

4882-4906

Tested Interval

County

Wash.

Dayoil Oil Co.

Lease Owner/Company Name

State

Colo.

31-20-54W

RECEIVED

Date	4-17-81	Ticket Number	830	FLUID SAMPLE DATA
Kind of Job	DST			Sampler Pressure 0 P.S.I.G. at Surface
Tester	T. Michel	Witness		Recovery Cu. Ft. Gas
Drilling Contractor	Toltek Drlg.			cc Oil
				cc Water 1600
				cc Mud 200
				Tot. Liquid cc. 1800

COLO. OIL & GAS CONS. COMM.

EQUIPMENT & HOLE DATA

Formation Tested	D Sand	
Elevation	4558	
Net Productive Interval	12	
All Depths Measured From	KB	
Total Depth	4906	
Main Hole/Casing Size	7 7/8	
Drill Collar Length	512	ID 2.25
Drill Pipe Length	4331	ID 3.826
Packer Depth(s)	4876-4882	
Depth Tester Valve	4861	

Gravity		° API @		° F.
Gas/Oil Ratio				cu. ft./bbl
		RESISTIVITY		CHLORIDE CONTENT
Recovery Water	1.50 @ 67	° F.	5,000	ppm
Recovery Mud	@	° F.		ppm
Recovery Mud Filtrate	@	° F.		ppm
Mud Pit Sample	@	° F.		ppm
Mud Pit Sample Filtrate	2.50 @ 50	° F.	2,500	ppm
Mud Weight		vis		cp

TYPE	AMOUNT	Depth Back Pres. Valve	Surface Choke	Bottom Choke
Cushion			3/8	3/4
Recovered	10 Feet of Mud			
Recovered	110 Feet of Muddy water			
Recovered	120 Feet of Water R.W. 1.50 at 64° - 5,000 ppm			
Recovered	Feet of			

marks Open tool for a 30 min. Initial Flow with a weak blow increasing to 4 in. in bucket at the end of the 30 min. Initial Shut-in 30 min., Open tool for a 60 min. Final Flow with a weak blow increasing to 4 in. in 60 min. Final Shut-in 60 min.

TEMPERATURE	Gauge No.	Gauge No.	Gauge No.	TIME
	Depth	11083	11082	
	Ft	4858	4903	
	Hour Clock	12	12	
Est	° F.	Blanked Off	Blanked Off	Tool
			yes	Opened 4:00 P.M.
Actual 123 ° F.				Opened 7:00 P.M.
	Pressures	Pressures	Pressures	Reported
	Field	Field	Field	Minutes
Initial Hydrostatic		2643		
Flow Initial		35		
Flow Final		71		30
Closed in		673		30
Flow Initial		88		
Flow Final		106		60
Closed in		638		60
Final Hydrostatic		2625		

Real Estate Inv.

Legal Name

Well No.

Test No.

4882-4906

Tested Interval

County

Nash.

State

Colo.

Davoll Oil Co.

Lessee Owner/Company Name

RECEIVED

Date 4-18-81 Ticket Number 848
 Kind Straight DST
 Tester Michel-Dutton Witness B. Durr
 Drilling Contractor Toltek Drlg.

MAY 15 1981

FLUID SAMPLE DATA

Complet Pressure 0 PSIG at Surface
 Recovery cu. ft. Gas
 cc Oil
 cc Water 2,000
 cc Mud
 Tot. Liquid cc 2,000
 Gravity ° API @ ° F
 Gas/Oil Ratio cu. ft./bbl
 RESISTIVITY CHLORIDE CONTENT
 Recovery Water 2.0 @ 70 ° F 3,000 ppm
 Recovery Mud (w) ° F ppm
 Recovery Mud Filtrate (w) ° F ppm
 Mud Pit Sample (w) ° F ppm
 Mud Pit Sample Filtrate 2.50 @ 50 ° F 2,500 ppm
 Mud Weight 9.9 vis 56 cp

EQUIPMENT & HOLE DATA

Formation Tested J Sand
 Elevation 4558 Ft.
 Net Productive Interval 10' Ft.
 All Depths Measured From KB
 Total Depth 4928 Ft.
 Main Hole/Casing Size 7-7/8
 Drill Collar Length 512 ID 2.25
 Drill Pipe Length 4415 ID 3.826
 Packer Depth(s) 4960-4966 Ft.
 Depth Tester Valve 4945 Ft.

Cushion TYPE AMOUNT - Depth Back Surface Bottom
 Ft. Pres. Valve Choke Choke
 3/8 3/4

Recovered 120 Feet of Muddy water (slight skim of oil)
 Recovered 2459 Feet of Water R.W. 1.20 @ 72° - 3,200 ppm (slightly gas cut)
 Recovered Feet of
 Recovered Feet of

Remarks Open tool for a 15 min. Initial Flow with a good blow increasing to the bottom of the bucket in 1 min. Then increasing to 3½ PSI at the end of the Initial Flow period. Initial Shut-in 30 min. Open tool for a 45 min. Final Flow with a good blow increasing to 12 oz. in 11 min. Then started to decrease to no blow at the end of the Final Flow period. Final Shut-in 45 min.

TEMPERATURE	Gauge No.	Gauge No.	Gauge No.	TIME
	Depth	Depth	Depth	
	ft	ft	ft	
Est ° F	Hour Clock	Hour Clock	Hour Clock	Tool
	Blanked Off	Blanked Off	Blanked Off	Opened 2:00 P.M.
Actual 124 ° F	Pressures	Pressures	Pressures	Opened 4:15 P.M.
	Field	Office	Field	Reported
				Computed
Initial Hydrostatic				Minutes
Initial			2713	
Flow			745	
Final			816	15
Closed in			957	30
Initial			886	
Flow			939	45
Final			975	45
Closed in				
Final Hydrostatic			2573	

Real Estate Investments

1

4966-4978

Test Interval

County

Wash.

Davoll Oil Co.

Lessee Owner/Company Name

State

Colo.

RECEIVED

MAY 15 1981

#1 Real Estate Investments
 C NW SE Section 31, T2N-R54W
 Washington Co., Colo.
 Elev. 4548' Gr. 4558 K.B.

4-14-81 Spud
 4-15-81 Drlg. 4200'
 4-16-81 Short Trip - Niobrara tight
 4-17-81 Running DST #1 - "D" Sand
 4-18-81 Running DST #2 & #3 - "J" Sand
 4-19-81 TD - D & A

Bit Record

	<u>Size</u>	<u>Make</u>	<u>Type</u>	<u>Depth Out</u>	<u>Feet</u>	<u>Hours</u>
	12 $\frac{1}{4}$	Reed	Y11J	Ran ZJTs 8 5/8 @ 92'	Gr, 102 KB	
1	7 7/8	HTC	OSC3	3664	3562	24 3/4
2	7 7/8	STC	DTJ	4787	1123	19 3/4
3	7 7/8	STC	DTJ	4978	191	16 1/4
4	7 7/8	STC	GDT-1	5050	72	9 1/4

Survey @ 3664' - 20

Survey @ 4787' - $\frac{1}{2}$ 0Mud

		<u>Wt.</u>
4317	Vis.	33 9.6
4412	Vis.	34 9.6
4475	Vis.	34 9.8
4537	Vis.	36 9.9
4569	Vis.	35 9.7
4600	Vis.	36
4694	Vis.	39 9.8
4789	Vis.	39 9.9
4820	Vis.	47
4888	Vis.	53 9.9
4906	Vis.	56 9.8
4915	Vis.	57 9.9
4953	Vis.	60 9.9
4970	Vis.	56 9.9
5000	Vis.	59 9.9
5020	Vis.	63 9.9
5030	Vis.	68 9.9
5050	Vis.	65 9.9

SAMPLE DESCRIPTION

4500-30 Dk. Gry. Fiss. Sh. w/Bent. and Pyr.

4530-60 Shale as above w/inoc. Prisms inc. Amt dns brn Ls.
w/sli Flour.

4560-90 Dns. Brn. Ls.

4590-4620 As Above

4620-50 Dk. gry fiss. sh.

4650-80 Inc. amt. Bent. & Pyr.

4680-4710 As Above

4710-40 Dk. gry fiss. sh.

4740-70 As Above.

4770-4800 As Above

4800-10 Dk. gry fiss. sh.

4810-20 Sli. inc. in. Bent.

4820-30 Inc. amt. lt. gry. sdy. Sltst.

4830-40 As Above w/Bent. & Pyr.

4840-50 Dk. gry fiss. sh.

4850-60 As Above w/Pyr.

4860-70 Dk. gry fiss. sh.

4870-80 Blk. slty. sh. w/Bent.

4880-90 Blk. slty. sh.

4890-4900 Inc. sdy. & slty. w/F. - g. Por.

4900-10 SS v.f.g. sli-f. P & P sli. vis. stn.
Sli flour & cut.

4910-20 Pred. dk. gry. fiss. sh. prob. cvs.

4920-30 Inbd. w/v.f.g. ss. No show. Sli P & P.

4930-40 Inc. amt. sh.

4940-50 Ok. gry. fiss. sh.

4950-60 SS., f. g. wh. - fri. - ind. ss. grns., sli. vis. stn.
v. p., no flour or cut.

SAMPLE DESCRIPTION (Cont'd.)

4960-70	Inc. amt. fri. ss. w/sli. vis. stn., no flour.
4970-80	SS. ind. ss. grns. sli. vis. stn., v. sli. flour.
4980-90	SS, f. g. P & P no vis. stn.
4990-5000	SS. as above.
5000-10	SS. v. fri., ind. sd. grns. w/Bent.
5010-20	As above becoming inc. Bent. no stn. odor or flour.
5020-30	As Above.
5030-40	As Above.
5040-50	Blk. fiss. sh. prob. cvs.

ELECTRIC LOG TOPS

<u>Formation</u>	<u>Depth</u>	<u>Datum</u>
Niobrara	4016	+ 542
Ft. Hays	4417	+ 141
Codell	4453	+ 105
Carlisle	4463	+ 95
Greenhorn	4546	+ 12
Bentonite	4783	- 225
"D" Sand	4874	- 316
"J" Sand	4958	- 460

"D" SAND

D.S.T. #1 4880-4906
Misrun - Hole in Drillpipe.

"D" SAND

D.S.T. #2 4882-4906
I.F. 30" Int. F weak to F
In 30" 4" in bucket

I.S.I.	30"	
I.F.	60#	
F.F.	60#	
I.H.	30#	
F.H.	30#	Rec. 10' mud, 110' mdy. wtr., 120' wtr.

SAMPLE DESCRIPTION (Cont'd.)"J" SAND

D.S.T. #3	
I.H. 2713	F.H. 2513
I.F. 745	F.F. 816
I.F. 15"	Blow to bottom of bucket
I.S.I. 30"	Open 45" blow dec. to zero in 30"
F.S.I. 45"	

Conclusion

Although this well ran structurally high on the top of the "D" Sand to the two wells in the NW4 and SW/4 of Section 31, T2N - R54W, a shaling out of the upper part of the 2nd bench of the "D" Sand reduced the anticipated structural advantage.

Robert K. Peckler
Consulting Geologist
815 Metrobank Building
Denver, Colorado 80202