

REPORT NO.
151015

PAGE NO. 1

TEST DATE:
19-MAY-1997

STAR

Schlumberger Testing Data Report Pressure Data Report

Schlumberger

COMPANY: JOHN L. COX

WELL: STATE-14 #1

TEST IDENTIFICATION

Test Type OPEN HOLE DST
Test No. THREE
Formation CANYON
Test Interval (ft) 9375 to 9444
Depth Reference GL

WELL LOCATION

Field N. HIGHTOWER
County LEA
State NEW MEXICO
Sec/Twn/Rng 14/12s/33e
Elevation (ft) 4244

HOLE CONDITIONS

Total Depth (MD/TVD) (ft) 9444'
Hole Size (in) 7.875
Casing/Liner I.D. (in) 8.625 @ 4125'
Perf'd Interval/Net Pay (ft) .. / 26
Shot Density/Diameter (in) ...

MUD PROPERTIES

Mud Type CUT B/W GEL-PAC
Mud Weight (lb/gal) 9.5
Mud Resistivity (ohm.m)
Filtrate Resistivity (ohm.m) .. 0.174 @ 60F
Filtrate Chlorides (ppm) 46000

INITIAL TEST CONDITIONS

Initial Hydrostatic (psi) 4732.31
Gas Cushion Type
Surface Pressure (psi)
Liquid Cushion Type
Cushion Length (ft)

TEST STRING CONFIGURATION

Pipe Length (ft)/I.D. (in) ... 8602 / 3.82
Collar Length (ft)/I.D. (in) .. 0 / 2.25
Packer Depth (ft)
Bottomhole Choke Size (in) ... 0.94
Gauge Depth (ft)/Type 9353/SLSR-884

NET PIPE RECOVERY

Volume	Fluid Type	Properties
210 ft	OIL	API 36@60
2371 ft	WATER	Rw0.206@60F 38000ppm

NET SAMPLE CHAMBER RECOVERY

Volume	Fluid Type	Properties
.846 cuft	Gas	
0 cc	Oil	
1950 cc	Water	Rw0.206@60F 38000ppm
0 cc	Mud	
Pressure: 575		GOR: 0
		GLR: 69

INTERPRETATION RESULTS

Model of Behavior
Fluid Type Used for Analysis..
Reservoir Pressure (psi)
Transmissibility (md.ft/cp) ..
Effective Permeability (md) ..
Skin Factor/Damage Ratio
Storativity Ratio, Omega
Interporos.Flow Coef..Lambda..
Distance to an Anomaly (ft) ..
Radius of Investigation (ft)..
Potentiometric Surface (ft) ..

ROCK/FLUID/WELLBORE PROPERTIES

Oil Density (deg. API)
Basic Solids (%)
Gas Gravity
GOR (scf/STB)
Water Cut (%)
Viscosity (cp)
Total Compressibility (1/psi)..
Porosity (%) 10
Reservoir Temperature (F) 154
Form.Val.Factor (bbl/STB)

PRODUCTION RATE DURING TEST: Data Report

COMMENTS:

We had a successful D.S.T. The total recovery was 30 bbls. At the top there as 3 bbls. of oil. The remainder of the recovery was 27 bbls. of slightly gas and mud cut water. There was a very small amount of oil in the sample chamber, too small to measure. Thank you for using Schlumberger.

Schlumberger		FIELD REPORT				TYPE OF SERVICE OPEN HOLE DST		DATE 19-MAY-1997		DISTRICT BOBBS		Page 2 of 2						
INSTRUMENT DATA						MUD DATA												
INSTRUMENT NO.		SLSR-884		J-1993		MUD TYPE		CUT B/W GEL-PAC		MUD WT		9.5	#/gal					
CAPACITY (PSIG)		10000		6400		VISCOSITY		35		WATER LOSS		18.0						
DEPTH		9353		9444		RESISTIVITY: OF MUD		0		°F		CC						
INSIDE-OUTSIDE		IN		OUT		RESISTIVITY: OF FILTRATE		0.174		@ 60		°F						
CLOCK CAP		ELECTRONIC		48 HOURS		CHLORIDES		46000		PPM								
TEMPERATURE °F		154				H2S DURING TEST		0		PPM								
						WELL BORE DATA												
I. HYD. PSIG		4732		4822		FORMATION TESTED							CANYON					
I. FLOW PSIG		110-453		153-517		NET PRODUCTIVE INTERVAL							26		ft	EST. POROSITY	10	%
I.S.I. PSIG		2611		2651		ELEVATION							4244		ft	DEPTH MEASURED FROM GL		
2nd FLOW PSIG						TOTAL MEASURED DEPTH							9444'		ft			
2nd S.I. PSIG						O H SIZE							7.875		in			
P. FLOW PSIG		495-718		529-806		CASING SIZE							8.625 @ 4125'					
P.S.I. PSIG		2650		2686		LINER SIZE												
P. HYD. PSIG		4726		4835		PERF INTERVAL FROM							ft		TO		ft	
						SHOT DENSITY												
CUSHION				LENGTH		AMOUNT		SURFACE PRESS		BOTTOM CHOKER SIZE								
NONE										0.34								
SAMPLER DATA																		
RECOVERY			RESISTIVITY			CHLORIDES												
GAS		.846	C.F.	RECOVERED WATER			0.206	@ 60	deg F	38000		PPM						
OIL		0	C.C.	RECOVERED MUD			0	deg F										
WATER		1950	C.C.	REC.MUD FILTRATE			0	deg F		PPM								
MUD		0	C.C.	BIT MUD			0	deg F										
GRAVITY		°API	°F	BIT MUD FILTRATE			0	deg F		PPM								
GOR		C.F./BBL			SAMPLER PRESSURE			575 psig										

REMARKS: We had a successful D.S.T. The total recovery was 30 bbls. At the top there as 3 bbls. of oil. The remainder of the recovery was 27 bbls. of slightly gas and mud cut water. There was a very small amount of oil in the sample chamber, too small to measure. Thank you for using Schlumberger.

SERVICE ORDER NUMBER:		151015		SCHLUMBERGER ENGINEER/TECHNICIAN		BILL GRAYSHAW	
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FIELD REPORT

TYPE OF SERVICE
OPEN HOLE DST

DATE
19-MAY-1997

DISTRICT
FORRE

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WELL OWNER: JOHN L. COX

SERVICE ORDER NUMBER: 151015

REPORTS ADDRESS: P.O. BOX 2217 / MIDLAND, TX 79702

WELL NAME & NO.: STATE-14 #1

FIELD: N. HIGHTOWER

LEAST-

LOCATION: 14/12e/33e

COUNTY: LBA

STATE: NEW MEXICO

TEST NO. THREE

TEST INTERVAL FROM 9375 FT TO 9444 FT = 69 FT

[illegible]

WELL TEST INTERPRETATION REPORT #:151015		PAGE: 3.
CLIENT : JOHN L. COX		19-MAY-97
REGION :CSD	SEQUENCE OF EVENTS Continued	FIELD:N. HIGHTOWER
DISTRICT:HOBBS		ZONE :CANYON
BASE :MIDLAND		WELL :STATE-14 #1
ENGINEER:BILL GRAYSHAW		LOCATION:14/12s/33e

DATE	TIME (HR:MIN)	DESCRIPTION	ET (MINS)	BHP (PSIA)	WHP (PSIG)
=====					
	10:27	PULLED PACKERS LOOSE	355		
	10:30	HYDROSTATIC MUD PULL TO RECOVERY	358	4726	

WELL TEST INTERPRETATION REPORT #:151015		PAGE: 12,
CLIENT : JOHN L. COX		19-MAY-97
REGION :CSD	DISTRIBUTION OF REPORTS	FIELD:N. HIGHTOWER
DISTRICT:HOBBS		ZONE :CANYON
BASE :MIDLAND		WELL :STATE-14 #1
ENGINEER:BILL GRAYSHAW		LOCATION:14/12#/33#

SCHLUMBERGER has sent copies of this report to the following:
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JOHN L. COX
P.O. BOX 2217
MIDLAND, TX 79702
(3 copies)

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WELL TEST INTERPRETATION REPORT #:151015		PAGE: 2,
CLIENT : JOHN L. COX		19-MAY-97
REGION :CSD	SEQUENCE OF EVENTS	FIELD:N. HIGHTOWER
DISTRICT:HOBBS		ZONE :CANYON
BASE :MIDI AND		WFLI :STATE-14 #1
ENGINEER:BILL GRAYSHAW		LOCATION:14/12s/33e

DATE	TIME (HR:MIN)	DESCRIPTION	ET (MINS)	BHP (PSIA)	WHP (PSIG)
=====					
19-MAY		OPEN TO BUBBLE HOSE ONLY			
	04:26	HYDROSTATIC MUD	-6	4732	
	04:30	SET PACKERS	-2		
	04:32	START FLOW	0	110	1"
		B.O.B. @ 35 SECONDS			
	04:33		1		1.4#
	04:34		2		2.2#
	04:37		5		3.4#
	04:42		10		4.4#
	04:47		15		5.2#
	05:02		30		6.8#
	05:17		45		7.2#
	05:32	END FLOW & START SHUT-IN	60	453	9#
	05:44	OPEN TO 1" CHOKE ONLY	72		
	05:56	GAS TO SURFACE	84		
	06:31	OPEN TO 1/4" CHOKE ONLY,	119		0#
	06:33	END SHUT-IN	121	2611	
	06:36	START FLOW	124	495	0#
	06:37		125		.5oz.
	06:38		126		.5oz.
	06:40	OPEN TO BUBBLE HOSE ONLY	128		1"
	06:41		129		1.25"
	06:46		134		2"
	06:51		139		3"
	06:56		144		9"
	06:57	B.O.B. @ 21 MINUTES	145		10"
	07:06		154		1#
	07:21		169		1.8#
	07:36		184		2.2#
	08:06		214		2.4#
	08:25	END FLOW & START SHUT-IN	233	718	2.6#
	10:25	END SHUT-IN	353	2650	

Continued next page

JOHN L. COX
STATE-14 #1
TOOL STRING SCHEMATIC

	TOOL DESCRIPTION	OD	ID	LENGTH	DEPTH
	SURFACE FLOWHEAD				0
	DRILL PIPE 16#	4.50	3.82	31.00	31
	SINGLE BALL SAFETY VALVE	6.50	2.25	2.380	33.38
	DRILL PIPE 16#	4.50	3.82	8571.	8604.38
	DRILL COLLARS	6.25	2.25	546.5	9150.88
	PUMPOUT DISK REVERSING VALVE	6.00	3.00	0.970	9151.85
	DRILL COLLARS	6.25	2.25	90.49	9242.34
	BREAKOFF PIN REVERSING VALVE	6.00	3.00	1.012	9243.35
	DRILL COLLARS	6.25	2.25	90.40	9333.75
	CROSS OVER SUB	6.00	2.50	1.210	9334.96
	MFE (MFEV-B)	5.75	0.94	10.02	9344.98
	MFE OH BYPASS (MBYP-B)	5.00	1.15	2.980	9347.96
	INSIDE RECORDER CARRIER	4.88	1.25	5.910	9353.87
	TR HYDRAULIC JAR (FJAR-B)	4.75	1.88	6.885	9360.76
	SAFETY JOINT (SAJ-BA)	4.75	2.50	1.880	9362.64
	BOB TAIL PACKER	7.00	1.50	6.220	9368.86
	BOB TAIL PACKER	7.00	1.50	6.140	9375
	PERFORATED ANCHOR	4.75	2.25	6.450	9381.45
	CROSS OVER SUB	6.00	2.56	0.700	9382.15
	DRILL COLLAR	6.25	2.25	31.35	9413.5
	CROSS OVER SUB	5.75	2.12	1.200	9414.7
	PERFORATED ANCHOR	4.75	2.25	22.00	9436.7
	OUTSIDE RECORDER CARRIER	4.75	2.75	7.300	9444

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