

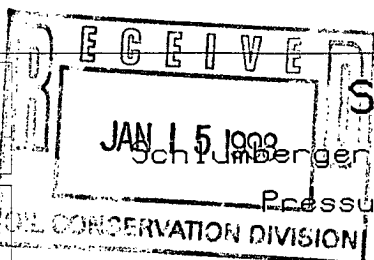
REPORT NO.

113944

PAGE NO. 1

TEST DATE:

13-DEC-1997



STAR

Schlumberger Testing Data Report

Pressure Data Report

Schlumberger

RAOC
WELL FILE

COMPANY: RIDGEWAY ARIZONA OIL CORP.

WELL: SOUTHGATE 36-1

TEST IDENTIFICATION

Test Type MFE-OH-HPR
 Test No. 2
 Formation
 Test Interval (ft) 2375 to 2430
 Depth Reference

WELL LOCATION

Field WC
 County CATRON
 State NEW MEXICO
 Sec/Twn/Rng 36T1SR21W
 Elevation (ft)

HOLE CONDITIONS

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

MUD PROPERTIES

Mud Type
 Mud Weight (lb/gal)
 Mud Resistivity (ohm.m)
 Filtrate Resistivity (ohm.m)..
 Filtrate Chlorides (ppm)

INITIAL TEST CONDITIONS

Initial Hydrostatic (psi) 636.70
 Gas Cushion Type
 Surface Pressure (psi)
 Liquid Cushion Type
 Cushion Length (ft)

TEST STRING CONFIGURATION

Pipe Length (ft)/I.D. (in) ... 0 /
 Collar Length (ft)/I.D. (in) .. 0 /
 Packer Depths (ft)
 Bottomhole Choke Size (in) ...
 Gauge Depth (ft)/Type 2351/HPR 0262

NET PIPE RECOVERY

Volume	Fluid Type	Properties
90 ft	WATER	Rw6.597@68F 850ppm

NET SAMPLE CHAMBER RECOVERY

Volume	Fluid Type	Properties
-0- cuft	Gas	
2100 cc	Water	Rw5.637@68F 1000ppm

Pressure: 40

GOR: 0

GLR: -0

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 (%)
 Reservoir Temperature (F)
 Form. Vol. Factor (bbl/STB)

PRODUCTION RATE DURING TEST: Data Report

COMMENTS:

This drill stem test was mechanically successful.

Thank you for using Schlumberger. For questions about this report please call the Testing district.

WELL TEST INTERPRETATION REPORT #:113944		PAGE: 2,
CLIENT : RIDGEWAY ARIZONA OIL CORP.		14-DEC-97
REGION :WESTERN	SEQUENCE OF EVENTS	FIELD:WC
DISTRICT:VERNAL		ZONE :
BASE :DENVER		WELL :SOUTHGATE 36-1
ENGINEER:C RICHARDS		LOCATION:36T1SR21W

DATE	TIME (HR:MIN)	DESCRIPTION	ET (MINS)	BHP (PSIA)	WHP (PSIG)
13-DEC	23:11	HYDROSTATIC MUD	-3	637	
	23:14	START FLOW 4"FLOWINBUCKET	0	51	
	23:15	BLOW TO BOTTOM OF BUCKET	1		
	23:18	3 OZ IN BUCKET	4		
	23:23	3 OZ IN BUCKET	9		
	23:28	2.5 OZ IN BUCKET	14		
	23:33	2 OZ IN BUCKET	19		
	23:38	1 OZ IN BUCKET	24		
	23:43	2" BLOW IN BUCKET	29		
	23:43	END FLOW & START SHUT-IN	29	44	
14-DEC	00:44	END SHUT-IN	90	475	
	00:45	START FLOW 2" FLOWINBUCKET	91	74	
	00:50	1" BLOW IN BUCKET	96		
	00:55	1" BLOW IN BUCKET	101		
	01:00	1"BLOW IN BUCKET	106		
	01:05	1"BLOW IN BUCKET	111		
	01:10	1" BLOW IN BUCKET	116		
	01:15	1"BLOW IN BUCKET	121		
	01:15	END FLOW & START SHUT-IN	121	61	
	02:15	END SHUT-IN	181	465	
	02:17	HYDROSTATIC MUD	183	529	

BOTTOMHOLE PRESSURE LOG

FIELD REPORT NO. 113944

COMPANY : RIDGEMAY AIRZONA OIL CORP.

INSTRUMENT NO. SFG262

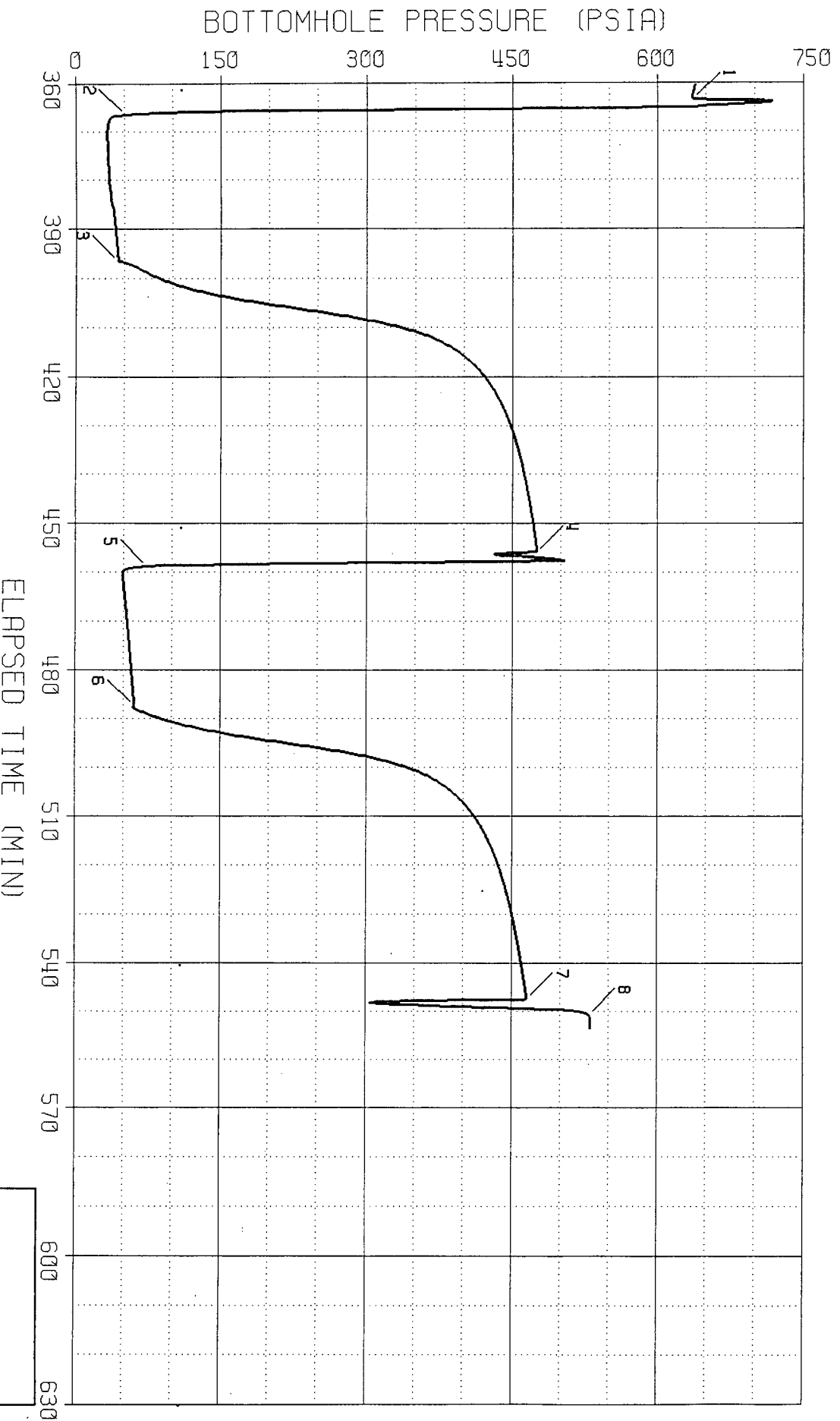
WELL : SOUTHGATE 35-1

DEPTH : 2351 FT

CAPACITY : 20000 PSI

Electronic Pressure Data

PORT OPENING : INSIDE



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BOTTOMHOLE TEMPERATURE LOG

FIELD REPORT NO. 113944

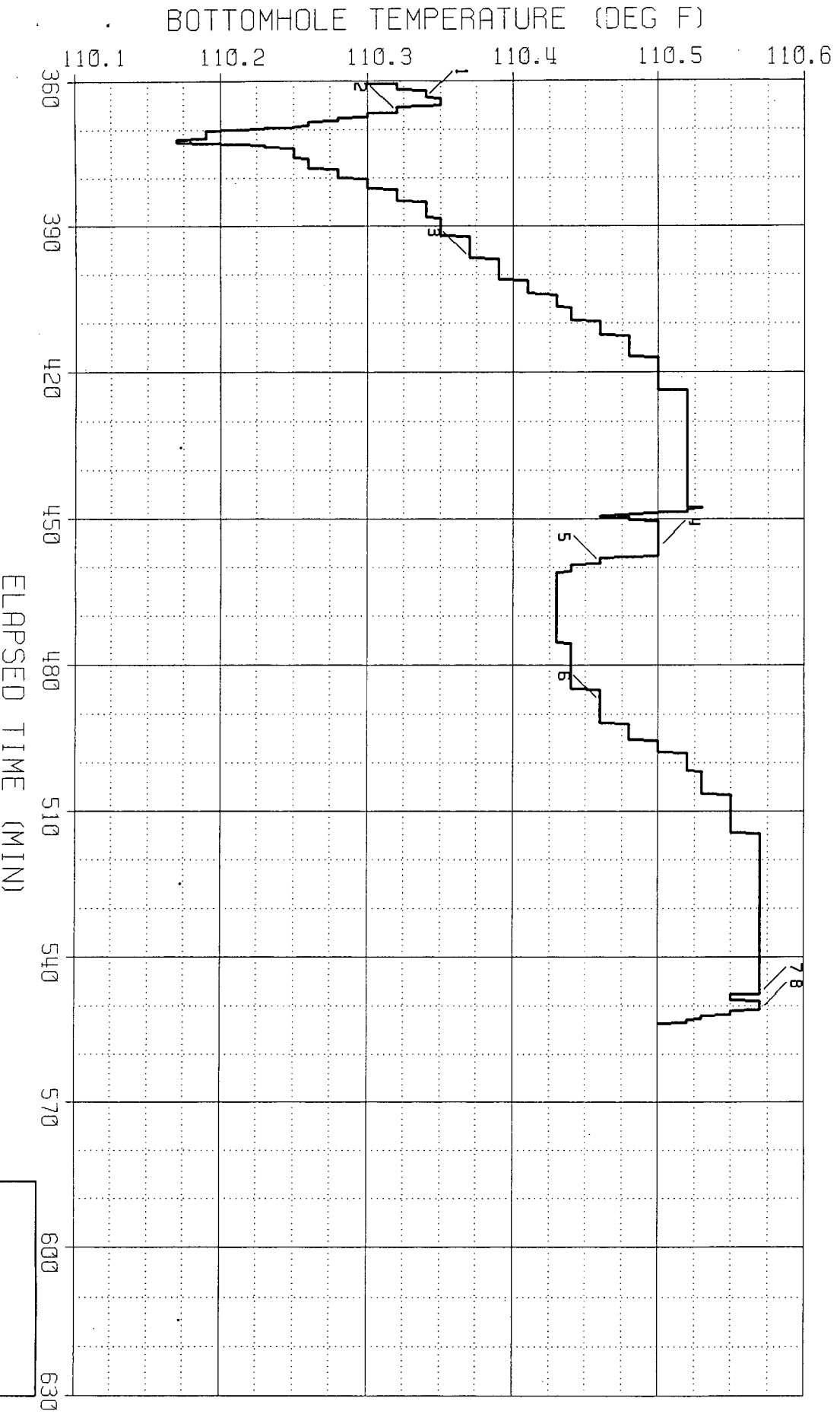
COMPANY : RIDGEWAY AIRZONE OIL CORP.

INSTRUMENT NO. SFG262

WELL : SOUTHCATE 36-1

DEPTH : 2351 FT

Electronic Temperature Data



ΔT (MIN)

0.096 0.17 0.30 0.55 0.98 1.8 3.4 6.5 14 39 60

HORNER PLOT

FIELD REPORT NO. 113944
INSTRUMENT NO. SPG262

COMPANY : RIDGEWAY AIRZONE OIL CORP.

WELL : SOUTHGATE 36-1

SHUTIN #1 : FLOW FLOW PRODUCTION 4.40 10.31

PLUT ELAPSED TIME RANGE: 39.7 TO 59.3 MIN

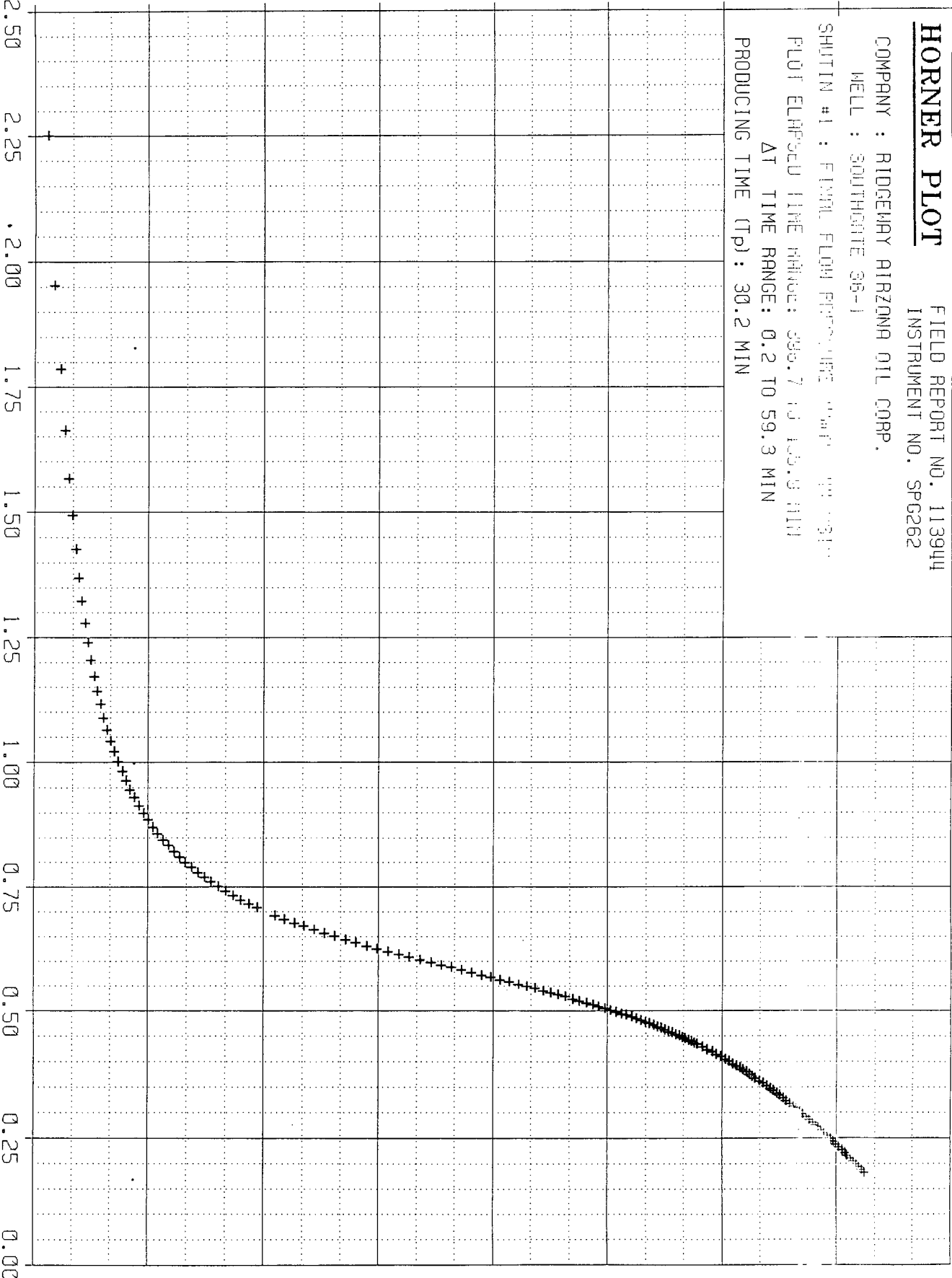
ΔT TIME RANGE: 0.2 TO 59.3 MIN

PRODUCING TIME (Tp) : 30.2 MIN

PRESSURE (PSIA)

40 100 160 220 280 340 400 460 520

LOG [(Tp+ΔT) / ΔT]



PRESSURE (PSIA)

530 470 410 350 290 230 170 110 50

0.059

0.12

0.23

0.47

0.94

ΔT (MIN)

1.9

4.0

8.4

20

59

00

HORNER PLOT

FIELD REPORT NO. 113944
INSTRUMENT NO. SPG262

COMPANY : RIDGEMAY ARIZONA OIL CORP.

WELL : SOUTHWEST 36-1

SHUTIN #2 : FINAL FLOW PRESSURE (Pwf) : 0.01 PSIG

PLOT ELAPSED TIME RANGE: 487.5 TO 547.4 MIN

ΔT TIME RANGE: 0.2 TO 60.0 MIN

PRODUCING TIME (Tp) : 58.7 MIN

$\log [(P_p + \Delta T) / \Delta T]$

3.00

2.70

2.40

2.10

1.80

1.50

1.20

0.90

0.60

0.30

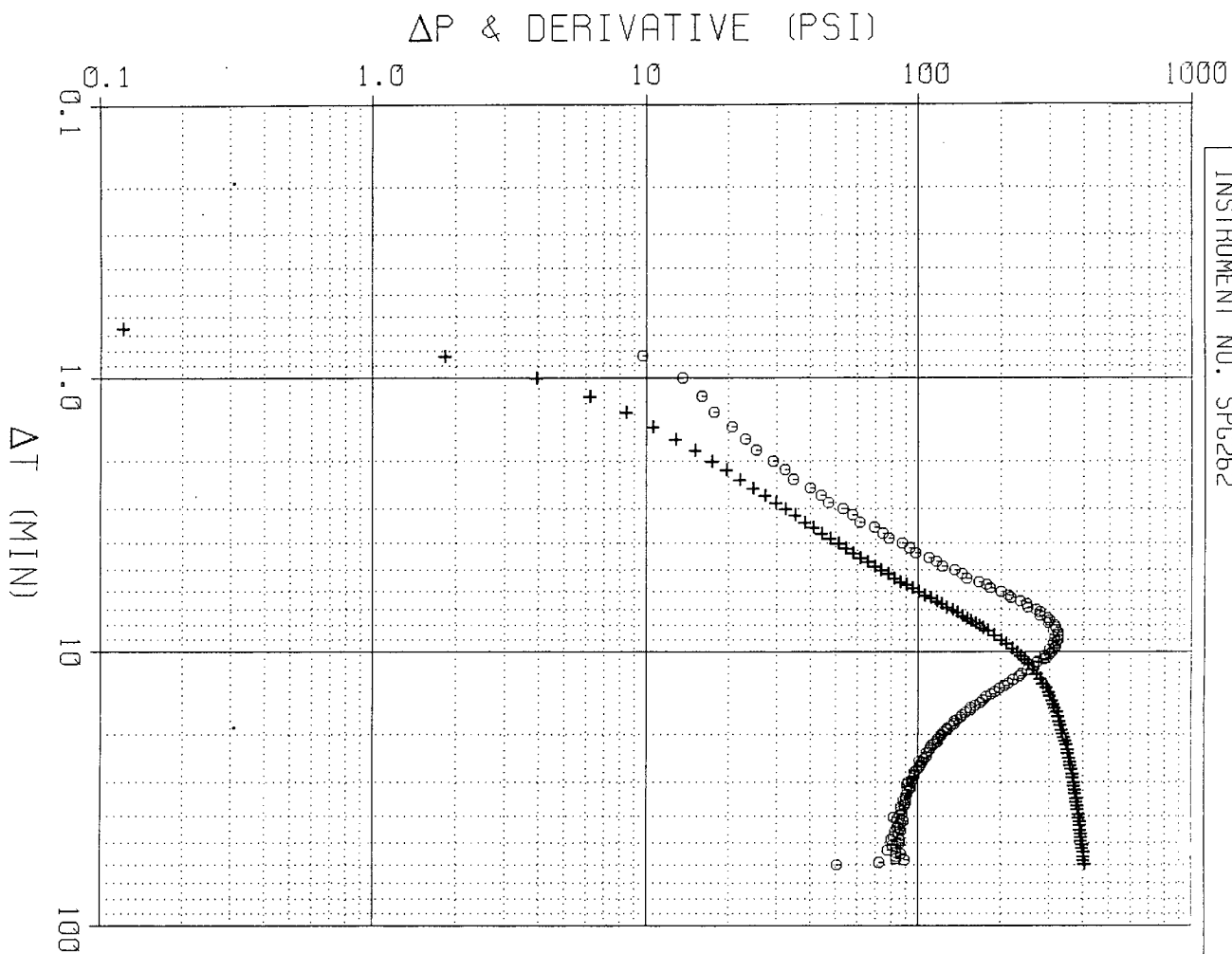
0.00

Schlumberger

LOG LOG PLOT

COMPANY : RIDGEMAY AIRZONA OIL CORP.
WELL : SOUTHGATE 36-1
FIELD REPORT NO. 113944
INSTRUMENT NO. SPG262

SHUTIN #2 : PRODUCING TIME (Tp) : 58.7 MIN
FINRL FLOW PRESSURE (Pwf) : 61 PSIA
PLOT ELAPSED TIME RANGE: 488.0 TO 547.4 MIN
ΔT TIME RANGE: 0.7 TO 60.0 MIN



Schlumberger

 ** WELL TEST DATA PRINTOUT **

COMPANY: RIDGEWAY AIRZONA OIL CORP.
 WELL: SOUTHGATE 36-1

FIELD REPORT NO. 113944
 INSTRUMENT NO. SPG262

RECORDER CAPACITY: 20000 PSI PORT OPENING: INSIDE DEPTH: 2351 FT

LABEL POINT INFORMATION

#	TIME OF DAY HH:MM:SS	DATE DD-MMM	EXPLANATION	ELAPSED TIME, MIN	BOT HOLE PRESSURE PSIA	BOT HOLE TEMP. DEG F
1	23:10:22	13-DEC	HYDROSTATIC MUD	363.37	636.70	110.34
2	23:13:22	13-DEC	START FLOW	366.37	51.46	110.32
3	23:43:32	13-DEC	END FLOW & START SHUT-IN	396.53	43.69	110.37
4	0:42:52	14-DEC	END SHUT-IN	455.87	474.58	110.50
5	0:45:52	14-DEC	START FLOW	458.87	73.71	110.46
6	1:14:22	14-DEC	END FLOW & START SHUT-IN	487.37	61.29	110.46
7	2:14:22	14-DEC	END SHUT-IN	547.37	465.08	110.57
8	2:17:42	14-DEC	HYDROSTATIC MUD	550.70	529.33	110.57

SUMMARY OF FLOW PERIODS

PERIOD	START ELAPSED TIME, MIN	END ELAPSED TIME, MIN	DURATION MIN	START PRESSURE PSIA	END PRESSURE PSIA	INITIAL PRESSURE PSIA
1	366.37	396.53	30.16	51.46	43.69	51.46
2	458.87	487.37	28.50	73.71	61.29	73.71

SUMMARY OF SHUTIN PERIODS

PERIOD	START ELAPSED TIME, MIN	END ELAPSED TIME, MIN	DURATION MIN	START PRESSURE PSIA	END PRESSURE PSIA	FINAL FLOW PRESSURE PSIA	PRODUCING TIME, MIN
1	396.53	455.87	59.34	43.69	474.58	43.69	30.16
2	487.37	547.37	60.00	61.29	465.08	61.29	58.66

TEST PHASE: FLOW PERIOD # 1

TIME OF DAY	DATE	ELAPSED TIME, MIN	DELTA TIME, MIN	BOT HOLE TEMP. DEG F	BOT HOLE PRESSURE PSIA
HH:MM:SS	DD-MMM				
23:13:22	13-DEC	366.37	0.00	110.32	51.46
23:28:22	13-DEC	381.37	15.00	110.30	34.84
23:43:22	13-DEC	396.37	30.00	110.37	43.62
23:43:32	13-DEC	396.53	30.16	110.37	43.69

TEST PHASE: SHUTIN PERIOD # 1

FINAL FLOW PRESSURE = 43.69 PSIA
PRODUCING TIME = 30.16 MIN

TIME OF DAY	DATE	ELAPSED TIME, MIN	DELTA TIME, MIN	BOT HOLE TEMP. DEG F	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
HH:MM:SS	DD-MMM						
23:43:32	13-DEC	396.53	0.00	110.37	43.69	0.00	
23:44:32	13-DEC	397.53	1.00	110.39	59.92	16.23	1.4936
23:45:32	13-DEC	398.53	2.00	110.39	69.52	25.83	1.2063
23:46:32	13-DEC	399.53	3.00	110.39	80.06	36.37	1.0435
23:47:32	13-DEC	400.53	4.00	110.39	92.56	48.87	0.9315
23:48:32	13-DEC	401.53	5.00	110.41	107.51	63.82	0.8471
23:49:32	13-DEC	402.53	6.00	110.41	125.70	82.01	0.7801
23:50:32	13-DEC	403.53	7.00	110.41	148.16	104.47	0.7250
23:51:32	13-DEC	404.53	8.00	110.43	175.74	132.05	0.6785
23:52:32	13-DEC	405.53	9.00	110.43	207.84	164.15	0.6386
23:53:32	13-DEC	406.53	10.00	110.43	241.45	197.76	0.6008
23:55:32	13-DEC	408.53	12.00	110.44	301.62	257.93	0.5457
23:57:32	13-DEC	410.53	14.00	110.46	343.98	300.29	0.4989
23:59:32	13-DEC	412.53	16.00	110.48	371.76	328.07	0.4601
0:01:32	14-DEC	414.53	18.00	110.48	390.68	346.99	0.4274
0:03:32	14-DEC	416.53	20.00	110.48	404.36	360.67	0.3913
0:05:32	14-DEC	418.53	22.00	110.50	414.80	371.11	0.3709
0:07:32	14-DEC	420.53	24.00	110.50	423.15	379.46	0.3515
0:09:32	14-DEC	422.53	26.00	110.50	430.03	386.34	0.3345
0:11:32	14-DEC	424.53	28.00	110.52	435.80	392.11	0.3175
0:13:32	14-DEC	426.53	30.00	110.52	440.71	397.02	0.3022
0:18:32	14-DEC	431.53	35.00	110.52	450.53	406.84	0.2609
0:23:32	14-DEC	436.53	40.00	110.52	457.92	414.23	0.2400
0:28:32	14-DEC	441.53	45.00	110.52	463.71	420.02	0.2208
0:33:32	14-DEC	446.53	50.00	110.52	468.46	424.77	0.2050
0:38:32	14-DEC	451.53	55.00	110.50	472.41	428.72	0.1809
0:42:52	14-DEC	455.87	59.34	110.50	474.58	430.89	0.1705

TEST PHASE: FLOW PERIOD # 2

TIME OF DAY	DATE	ELAPSED TIME, MIN	DELTA TIME, MIN	BOT HOLE TEMP. DEG F	BOT HOLE PRESSURE PSIA
HH:MM:SS	DD-MMM				
0:45:52	14-DEC	458.87	0.00	110.46	73.71
1:00:52	14-DEC	473.87	15.00	110.43	55.49
1:14:22	14-DEC	487.37	28.50	110.46	61.29

TEST PHASE: SHUTIN PERIOD # 2

FINAL FLOW PRESSURE = 61.29 PSIA
PRODUCING TIME = 58.66 MIN

TIME OF DAY HH:MM:SS	DATE DD-MMM	ELAPSED TIME, MIN	DELTA TIME, MIN	BOT HOLE TEMP. DEG F	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORN TIME
1:14:22	14-DEC	487.37	0.00	110.46	61.29	0.00	
1:15:22	14-DEC	488.37	1.00	110.46	65.22	3.93	1.7757
1:16:22	14-DEC	489.37	2.00	110.46	78.59	17.30	1.4829
1:17:22	14-DEC	490.37	3.00	110.46	93.73	32.44	1.3119
1:18:22	14-DEC	491.37	4.00	110.46	111.98	50.69	1.1949
1:19:22	14-DEC	492.37	5.00	110.48	134.21	72.92	1.1049
1:20:22	14-DEC	493.37	6.00	110.48	161.46	100.17	1.0325
1:21:22	14-DEC	494.37	7.00	110.48	193.68	132.39	0.9712
1:22:22	14-DEC	495.37	8.00	110.50	228.01	166.72	0.9213
1:23:22	14-DEC	496.37	9.00	110.50	260.71	199.42	0.8712
1:24:22	14-DEC	497.37	10.00	110.50	289.15	227.86	0.8317
1:26:22	14-DEC	499.37	12.00	110.52	331.18	269.89	0.7710
1:28:22	14-DEC	501.37	14.00	110.52	358.29	297.00	0.7112
1:30:22	14-DEC	503.37	16.00	110.53	376.66	315.37	0.6610
1:32:22	14-DEC	505.37	18.00	110.53	390.01	328.72	0.6213
1:34:22	14-DEC	507.37	20.00	110.55	400.31	339.02	0.5917
1:36:22	14-DEC	509.37	22.00	110.55	408.56	347.27	0.5612
1:38:22	14-DEC	511.37	24.00	110.55	415.39	354.10	0.5311
1:40:22	14-DEC	513.37	26.00	110.55	421.21	359.92	0.5117
1:42:22	14-DEC	515.37	28.00	110.57	426.23	364.94	0.4917
1:44:22	14-DEC	517.37	30.00	110.57	430.67	369.38	0.4716
1:49:22	14-DEC	522.37	35.00	110.57	439.69	378.40	0.4216
1:54:22	14-DEC	527.37	40.00	110.57	446.89	385.60	0.3911
1:59:22	14-DEC	532.37	45.00	110.57	452.61	391.32	0.3614
2:04:22	14-DEC	537.37	50.00	110.57	457.48	396.19	0.3311
2:09:22	14-DEC	542.37	55.00	110.57	461.62	400.33	0.3112
2:14:22	14-DEC	547.37	60.00	110.57	465.08	403.79	0.2912

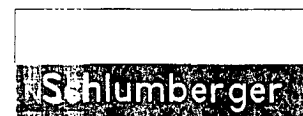
RIDGEWAY ARIZONA OIL CORP.
SOUTHGATE 36-1
TOOL STRING SCHEMATIC

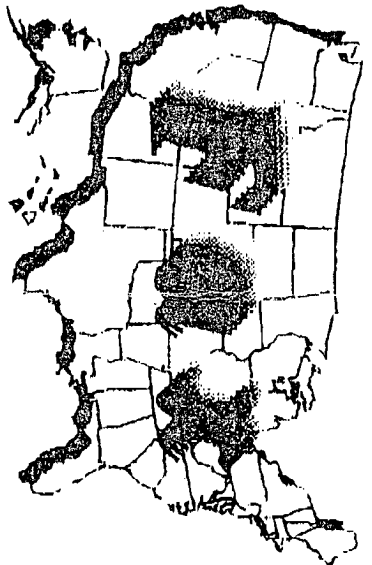
	TOOL DESCRIPTION	OD	ID	LENGTH	DEPTH
☐	DRILL PIPE	4.5	3.80	1749	1749
☐	DRILL COLLARS	6.25	2.25	358	2107
☐	REVERSE SUB PUMP OUT	6.0	3.12	1.15	2108.15
☐	DRILL COLLARS	6.25	2.25	60	2168.15
☐	REVERSE SUB PIN TYPE	6.0	3.12	1.14	2169.29
☐	DRILL COLLARS	6.25	2.25	60	2229.29
☐	CROSS OVER SUB	6.0	2.25	.69	2229.98
☐	MFE (MFE-B)	5.0	0.94	9.62	2239.6
☐	MFE OH BYPASS (MFE-B)	5.0	1.18	2.98	2242.58
☐	ELECTRONIC-GAUGE 0262	4.875	1.18	7.75	2250.33
☐	TR HYDRALIC JAR (FJAR-B)	4.75	1.88	7.31	2257.64
☐	SAFTEY JOINT	4.75	2.25	1.97	2259.61
☐	SAFTEY SEAL (SAFS-T)	6.0	1.5	4.90	2264.51
☒	BOB TAIL PACKER	7.0	1.5	4.05	2268.56
☒	BOB TAIL PACKER	7.0	1.5	6.23	2274.79
☐	PERFORATED ANCOR	4.75	2.0	6.0	2280.79
☐	RECORDER J-200 J-1043	4.875	1.18	6.0	2286.79
☐	RECORDER J-200 J-1243	4.875	1.18	6.0	2292.79
☐	PERFORATED ANCOR	4.75	2.0	37.0	2329.79

Report Number: 113944

Test Date: 13-DEC-1997

Note: All Depths to Bottom of Tool





1438
2508
16

From:

George L. Scott, Jr

Scott Exploration, Inc.

Phone 505-622-5891

Fax 505-622-6671

Suite 648, Petroleum Bldg.

Roswell, New Mexico 88201

Tel: (505) 622-5891

FAX: (505) 622-6671

Date: 20 Jan 98

To:

Roy Johnson

FAX 505-827-8177

Ridge way Arizona South State 36 #1
660' FN & WL Sec 36 - T15 - R21W
KB 7560' GL 7548'

Roy: The Riggs Zone was
formerly referred to as the
"Granite Wash" or "Lower
Oak Creek". This section
the facies are important
Pay Section.

San Andres Fm - - - - - 1070 (+6490)
Glorieta Fm - - - - - 1438 (+6122)
Supai GP - - - - - 1684 (+5876)
Ft Apache Mb of
Condary Fm of Supai GP - - - 2280 (+2527)
(Not picking Condary top)

Amos Wash Fm of Supai GP - - - 2371 (+5188)
(Also top of Big A Badde Mb) - - - 2530 (+5030)
Raven Mb of Amos Wash Fm - - - 2622 (+4937)
Oak Creek Fm of
Supai GP - - - - - 2962 (+4598)
"Riggs Zone of
Oak Creek Fm - - - - - 3085 (+4475)
Pre Cambrian - - - - -