WELL NAME:	Spangenberg #1 OWWO
COMPANY:	Parrish / Burk & Williams
LOCATION:	33-22S-12W
	Stafford County Kansas
DATE:	07/20/96

TRILOBITE TESTING L.L.C.

OPERATOR : Parrish/Burk & Williams DATE 07/20/96
WELL NAME: Spangenberg #1 OWWO KB 0.00 ft TICKET NO: 9419 DST #1
LOCATION : 33-22S-12W, Stafford KS GR 1841.00 ft FORMATION: Cong Sand
INTERVAL : 3613.00 To 3700.00 ft TD 3762.00 ft TEST TYPE: CONV. STRADDLE

RECORDER DATA

Mins		Field	1	2	3	4
PF 30	Rec.	24174	24174	2342	10992	
SI 45	Range(Psi)	3050.0	3050.0	4995.0	4050.0	0.0
SF 60	Clock(hrs)	12hr	12hr	Alpin	12hr	
FS 45	Depth(ft)	3686.0	3686.0	3617.0	3757.0	0.0

TIME DATA----------
PF Fr. 0640 to 0710 hr
IS Fr. 0710 to 0755 hr
SF Fr. 0755 to 0855 hr
FS Fr. 0855 to 0940 hr

	Field	1	2	3	4
A. Init Hydro	2011.0	1985.0	1955.0	2233.0	0.0
B. First Flow	119.0	121.0	89.0	0.0	0.0
B1. Final Flow	172.0	158.0	141.0	0.0	0.0
C. In Shut-in	660.0	663.0	668.0	0.0	0.0
D. Init Flow	210.0	214.0	163.0	0.0	0.0
E. Final Flow	278.0	278.0	264.0	0.0	0.0
F. Fl Shut-in	530.0	531.0	538.0	0.0	0.0
G. Final Hydro	1919.0	1900.0	1887.0	2104.0	0.0
Inside/Outside	O	O	I	T	

T STARTED 0520 hr
T ON BOTM 0638 hr
T OPEN 0640 hr
T PULLED 0940 hr
T OUT 1121 hr

RECOVERY
Tot Fluid 590.00 ft of 485.00 ft in DC and 105.00 ft in DP
790.00 ft of Gas in pipe
90.00 ft of Gassy muddy oil - 10% gas, 10% oil, 10% water, 70% mud
500.00 ft of Gassy mud & water cut oil - 20% gas, 50% oil, 15% water, 15% mud

TOOL DATA----------

Tool Wt.	2900.00 lbs
Wt Set On Packer	30000.00 lbs
Wt Pulled Loose	80000.00 lbs
Initial Str Wt	65000.00 lbs
Unseated Str Wt	67000.00 lbs
Bot Choke	0.75 in
Hole Size	7.88 in
D Col. ID	2.25 in
D. Pipe ID	3.80 in
D.C. Length	485.00 ft
D.P. Length	3110.00 ft

SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

MUD DATA----------

Mud Type	Starch
Weight	9.20 lb/cf
Vis.	44.00 S/L
W.L.	10.40 in3
F.C.	0.00 in
Mud Drop	N
Amt. of fill	0.00 ft
Btm. H. Temp.	108.00 F
Hole Condition	good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	3
Cushion Amt.	0.00
Cushion Type	
Reversed Out	N
Tool Chased	N
Tester	Paul Simpson
Co. Rep.	Jeff & Tom
Contr.	Sterling
Rig #	4
Unit #	
Pump T.	

BLOW DESCRIPTION
Initial Flow -
1.5" blow building to bottom of bucket in 6 minutes

Initial Shutin -
.5" blow building to 8"

Final Flow -
2" blow building to bottom of bucket in 5 minutes

Final Shutin -
Surface blow building to 2"

SAMPLES:
SENT TO:

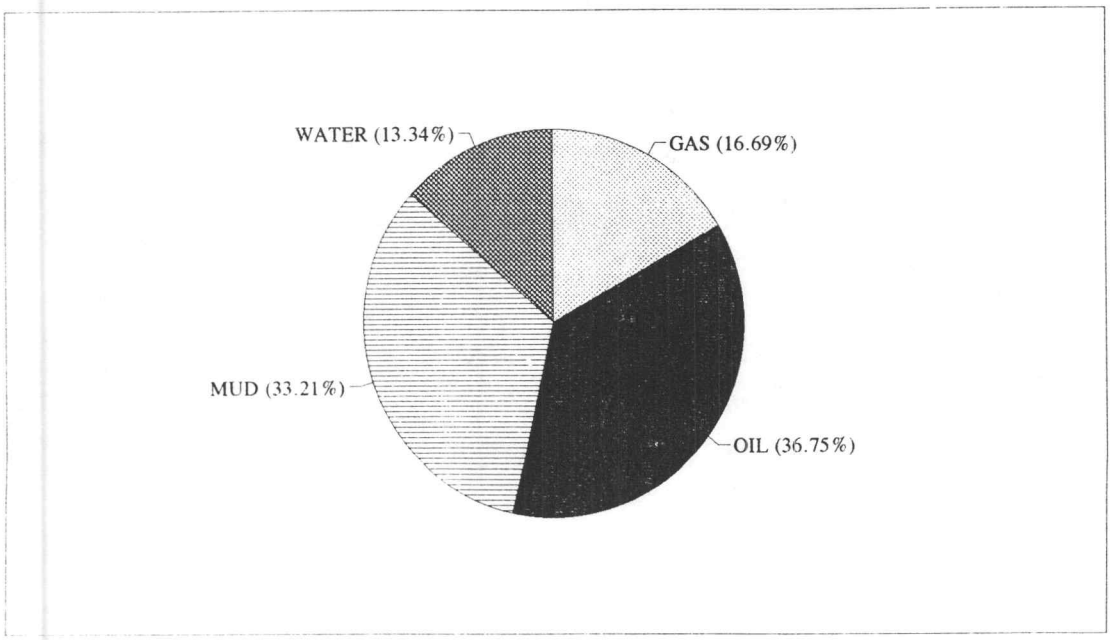
Test Successful: Y

CALCULATED RECOVERY ANALYSIS

DST 1 TICKE 9419

SAMPLE #		TOTAL FEET		GAS %	GAS FEET	OIL %	OIL FEET	WATER %	WATER FEET	MUD %	MUD FEET
DRILL	1	90	10	10	9	10	9	10	9	70	63
PIPE	2	15	20	50	3	15	7.5	15	2.25	15	2.25
	3				0		0		0		0
	4				0		0		0		0
	5				0		0		0		0
	6				0		0		0		0
WEIGHT	1				0		0		0		0
PIPE	2				0		0		0		0
	3				0		0		0		0
	4				0		0		0		0
DRILL	1	485	20	50	97	15	242.5	15	72.75	15	72.75
COLLAR	2				0		0		0		0
	3				0		0		0		0
	4				0		0		0		0
	5				0		0		0		0
TOTAL		590			109		259		84		138

			HRS OPEN		BBL/DAY
BBL OIL=	1.42046	*	1.5	=	22.7273
BBL WATER	0.51572	*		=	8.25156
BBL MUD=	1.2836				
BBL GAS =	0.64497				



TEST HISTORY

9419 Burke/Williams Spangenberg #1 OWWO

Flag Points

	t(Min.)	P(PSIg)
A:	0.00	1954.92
B:	0.00	88.79
C:	29.00	140.57
D:	44.00	668.22
E:	0.00	163.57
F:	60.00	264.45
G:	47.00	538.30
Q:	0.00	1887.36

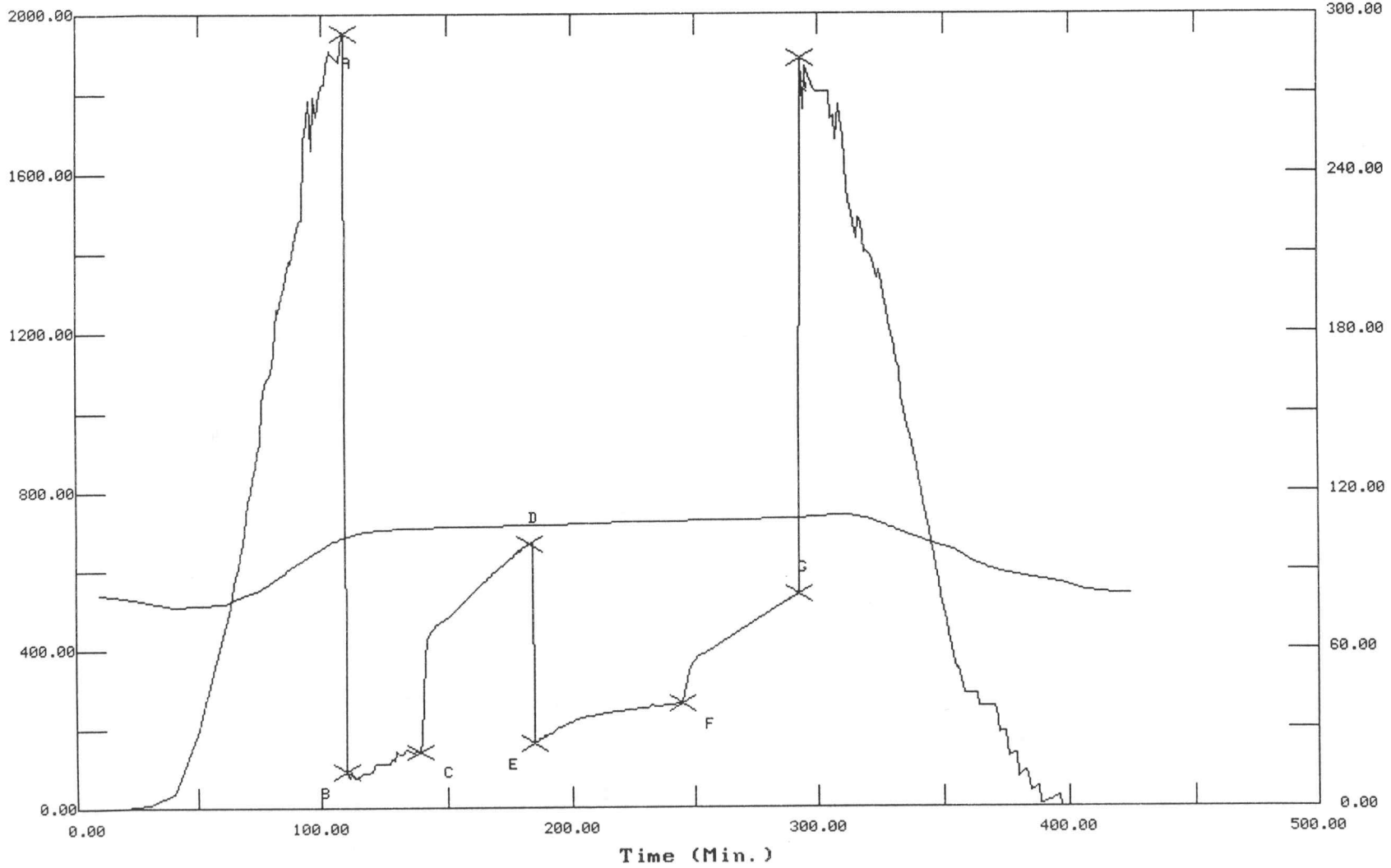
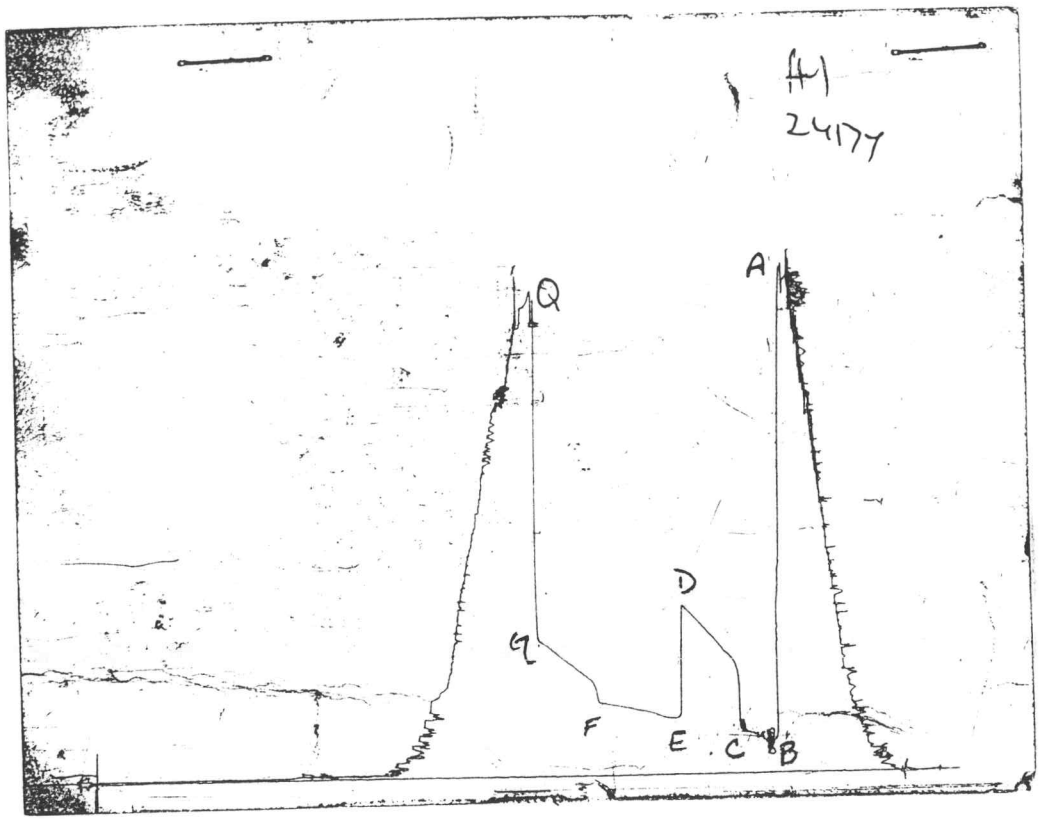
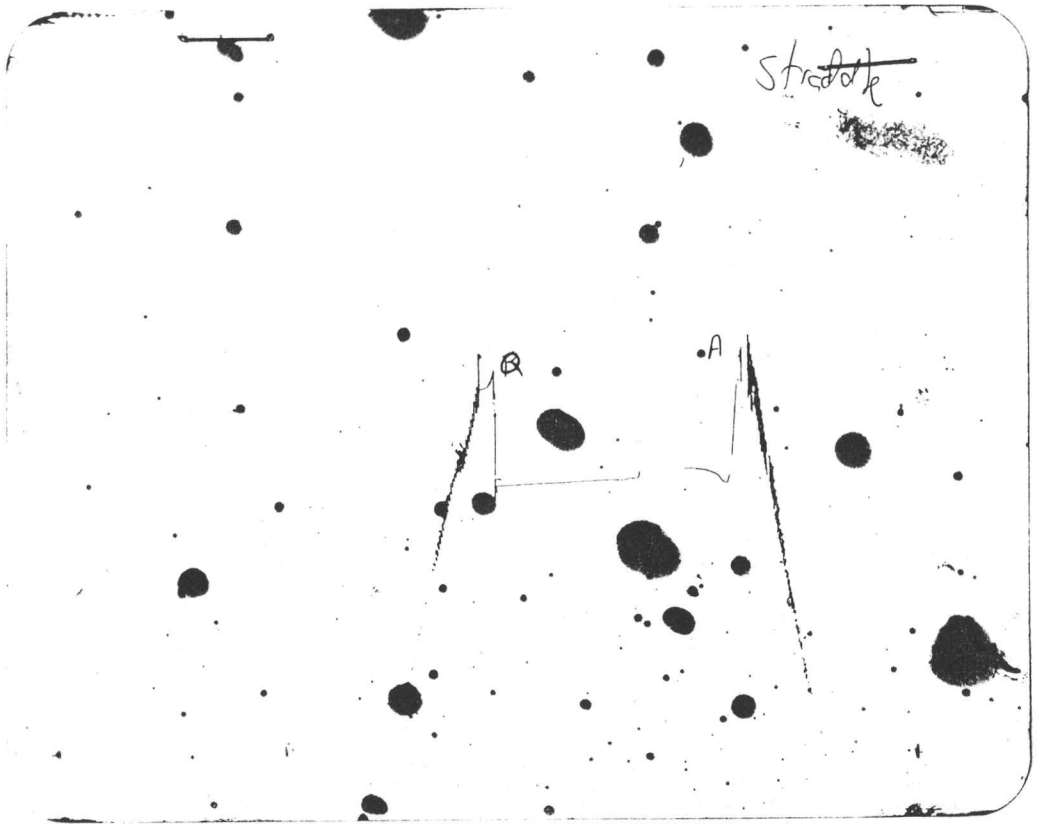


CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9419 Burke/Williams Spangenberg #1 OWWO

DATE: 07/20/96 TIME: 04:52:25

		Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
******	Initial Hydro.	109.00	1954.9	0.0	102.62		
******	Start Flow 1	0.00	88.8	0.0	102.88		
		1.00	72.9	-15.9	103.16		
		2.00	89.4	0.6	103.45		
		3.00	74.0	-14.8	103.74		
		4.00	75.4	-13.3	104.01		
		5.00	79.1	-9.7	104.24		
		6.00	82.3	-6.5	104.45		
		7.00	87.8	-1.0	104.64		
		8.00	88.5	-0.3	104.82		
		9.00	87.9	-0.9	104.97		
		10.00	92.5	3.7	105.11		
		11.00	108.0	19.2	105.23		
		12.00	110.0	21.2	105.35		
		13.00	111.9	23.1	105.45		
		14.00	111.2	22.4	105.53		
		15.00	110.2	21.4	105.60		
		16.00	109.0	20.2	105.67		
		17.00	110.4	21.7	105.73		
		18.00	121.5	32.7	105.79		
		19.00	119.3	30.5	105.85		
		20.00	142.4	53.6	105.92		
		21.00	135.0	46.2	105.95		
		22.00	133.6	44.8	106.00		
		23.00	143.7	54.9	106.04		
		24.00	145.4	56.7	106.07		
		25.00	143.6	54.8	106.11		
		26.00	136.8	48.0	106.14		
		27.00	137.5	48.8	106.17		
		28.00	141.2	52.5	106.19		
******	End Flow 1	29.00	140.6	51.8	106.22		
******	Start Shutin 1	0.00	140.6	0.0	106.22	0.0000	0.020
		1.00	173.7	33.2	106.25	30.0000	0.030
		2.00	383.9	243.3	106.29	15.5000	0.147
		3.00	424.1	283.5	106.31	10.6667	0.180
		4.00	442.5	301.9	106.35	8.2500	0.196
		5.00	451.9	311.3	106.38	6.8000	0.204
		6.00	458.3	317.8	106.41	5.8333	0.210
		7.00	463.0	322.5	106.44	5.1429	0.214
		8.00	467.0	326.5	106.47	4.6250	0.218
		9.00	471.0	330.4	106.50	4.2222	0.222
		10.00	475.6	335.0	106.52	3.9000	0.226
		11.00	480.6	340.1	106.55	3.6364	0.231
		12.00	486.3	345.7	106.57	3.4167	0.236
		13.00	492.3	351.7	106.60	3.2308	0.242
		14.00	497.9	357.4	106.62	3.0714	0.248
		15.00	504.1	363.6	106.64	2.9333	0.254
		16.00	510.4	369.9	106.66	2.8125	0.261
		17.00	516.7	376.1	106.68	2.7059	0.267
		18.00	522.9	382.3	106.70	2.6111	0.273
		19.00	529.2	388.6	106.72	2.5263	0.280

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9419 Burke/Williams Spangenberg #1 OWWO

DATE: 07/20/96 TIME: 04:52:25

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	20.00	535.5	394.9	106.74	2.4500	0.287
	21.00	541.4	400.8	106.76	2.3810	0.293
	22.00	547.6	407.0	106.79	2.3182	0.300
	23.00	553.7	413.2	106.80	2.2609	0.307
	24.00	559.9	419.3	106.83	2.2083	0.313
	25.00	565.7	425.1	106.85	2.1600	0.320
	26.00	571.7	431.1	106.86	2.1154	0.327
	27.00	577.6	437.0	106.88	2.0741	0.334
	28.00	583.5	442.9	106.90	2.0357	0.340
	29.00	589.2	448.7	106.92	2.0000	0.347
	30.00	595.0	454.4	106.94	1.9667	0.354
	31.00	600.6	460.0	106.96	1.9355	0.361
	32.00	606.2	465.6	106.98	1.9062	0.367
	33.00	611.8	471.3	106.99	1.8788	0.374
	34.00	617.2	476.6	107.02	1.8529	0.381
	35.00	622.7	482.1	107.03	1.8286	0.388
	36.00	628.1	487.5	107.05	1.8056	0.395
	37.00	633.1	492.5	107.07	1.7838	0.401
	38.00	638.3	497.8	107.10	1.7632	0.407
	39.00	643.5	502.9	107.10	1.7436	0.414
	40.00	648.6	508.0	107.12	1.7250	0.421
	41.00	653.6	513.1	107.14	1.7073	0.427
	42.00	658.7	518.1	107.16	1.6905	0.434
	43.00	663.5	523.0	107.17	1.6744	0.440
****** End Shut-in 1	44.00	668.2	527.7	107.19	1.6591	0.447
****** Start Flow 2	0.00	163.6	0.0	107.20		
	1.00	166.3	2.8	107.21		
	2.00	173.0	9.4	107.20		
	3.00	176.5	12.9	107.20		
	4.00	180.9	17.3	107.21		
	5.00	184.5	21.0	107.22		
	6.00	188.3	24.8	107.24		
	7.00	185.0	21.4	107.27		
	8.00	194.5	31.0	107.30		
	9.00	198.9	35.3	107.34		
	10.00	200.7	37.2	107.38		
	11.00	204.0	40.5	107.44		
	12.00	208.0	44.4	107.49		
	13.00	209.7	46.2	107.55		
	14.00	212.8	49.3	107.60		
	15.00	216.3	52.7	107.66		
	16.00	218.5	54.9	107.72		
	17.00	222.2	58.7	107.77		
	18.00	224.5	60.9	107.82		
	19.00	225.1	61.5	107.86		
	20.00	228.1	64.5	107.91		
	21.00	228.8	65.2	107.95		
	22.00	228.9	65.3	107.99		
	23.00	229.4	65.8	108.01		
	24.00	229.7	66.1	108.05		
	25.00	235.9	72.3	108.08		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9419 Burke/Williams Spangenberg #1 OWWO

DATE: 07/20/96 TIME: 04:52:25

		Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
		26.00	235.9	72.3	108.11		
		27.00	233.2	69.7	108.12		
		28.00	237.9	74.4	108.14		
		29.00	237.7	74.1	108.17		
		30.00	237.3	73.8	108.18		
		31.00	239.9	76.4	108.20		
		32.00	242.0	78.4	108.21		
		33.00	243.8	80.2	108.24		
		34.00	243.3	79.7	108.25		
		35.00	244.4	80.8	108.27		
		36.00	244.5	80.9	108.27		
		37.00	245.6	82.1	108.30		
		38.00	247.2	83.6	108.31		
		39.00	247.9	84.3	108.33		
		40.00	246.8	83.3	108.35		
		41.00	247.7	84.2	108.36		
		42.00	248.8	85.3	108.38		
		43.00	249.3	85.8	108.40		
		44.00	249.8	86.2	108.41		
		45.00	250.7	87.1	108.44		
		46.00	252.5	89.0	108.45		
		47.00	253.7	90.1	108.47		
		48.00	257.6	94.0	108.49		
		49.00	254.1	90.6	108.50		
		50.00	255.0	91.4	108.53		
		51.00	255.0	91.5	108.54		
		52.00	255.8	92.2	108.57		
		53.00	257.1	93.6	108.59		
		54.00	259.7	96.1	108.62		
		55.00	258.2	94.7	108.64		
		56.00	260.2	96.6	108.67		
		57.00	259.8	96.3	108.69		
		58.00	261.1	97.5	108.70		
		59.00	261.5	97.9	108.73		
******	End Flow 2	60.00	264.4	100.9	108.75		
******	Start Shutin 2	0.00	264.4	0.0	108.75	0.0000	0.070
		1.00	291.9	27.4	108.77	90.0000	0.085
		2.00	324.0	59.5	108.80	45.5000	0.105
		3.00	348.0	83.6	108.82	30.6667	0.121
		4.00	363.7	99.3	108.85	23.2500	0.132
		5.00	372.9	108.4	108.88	18.8000	0.139
		6.00	378.3	113.9	108.91	15.8333	0.143
		7.00	382.2	117.8	108.93	13.7143	0.146
		8.00	385.2	120.8	108.96	12.1250	0.148
		9.00	388.0	123.5	108.99	10.8889	0.151
		10.00	391.1	126.6	109.01	9.9000	0.153
		11.00	394.4	129.9	109.03	9.0909	0.156
		12.00	398.1	133.6	109.05	8.4167	0.158
		13.00	402.0	137.6	109.08	7.8462	0.162
		14.00	406.1	141.7	109.10	7.3571	0.165
		15.00	410.1	145.7	109.12	6.9333	0.168

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9419 Burke/Williams Spangenberg #1 OWWO

DATE: 07/20/96 TIME: 04:52:25

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	16.00	414.1	149.6	109.13	6.5625	0.171
	17.00	418.3	153.8	109.16	6.2353	0.175
	18.00	422.4	158.0	109.18	5.9444	0.178
	19.00	426.6	162.1	109.20	5.6842	0.182
	20.00	430.8	166.3	109.21	5.4500	0.186
	21.00	435.1	170.6	109.24	5.2381	0.189
	22.00	439.1	174.7	109.25	5.0455	0.193
	23.00	443.3	178.9	109.27	4.8696	0.197
	24.00	447.5	183.0	109.29	4.7083	0.200
	25.00	451.7	187.2	109.30	4.5600	0.204
	26.00	455.7	191.3	109.32	4.4231	0.208
	27.00	459.8	195.4	109.33	4.2963	0.211
	28.00	463.9	199.5	109.35	4.1786	0.215
	29.00	468.1	203.7	109.36	4.0690	0.219
	30.00	472.2	207.7	109.37	3.9667	0.223
	31.00	476.3	211.8	109.39	3.8710	0.227
	32.00	480.3	215.9	109.41	3.7812	0.231
	33.00	484.4	220.0	109.43	3.6970	0.235
	34.00	488.3	223.8	109.43	3.6176	0.238
	35.00	492.2	227.8	109.45	3.5429	0.242
	36.00	496.3	231.8	109.47	3.4722	0.246
	37.00	500.0	235.6	109.48	3.4054	0.250
	38.00	504.0	239.5	109.49	3.3421	0.254
	39.00	507.8	243.4	109.50	3.2821	0.258
	40.00	511.8	247.3	109.52	3.2250	0.262
	41.00	515.6	251.2	109.53	3.1707	0.266
	42.00	519.3	254.9	109.55	3.1190	0.270
	43.00	523.2	258.7	109.56	3.0698	0.274
	44.00	527.0	262.5	109.57	3.0227	0.278
	45.00	530.8	266.4	109.58	2.9778	0.282
	46.00	534.5	270.1	109.60	2.9348	0.286
****** End Shut-in 2	47.00	538.3	273.9	109.61	2.8936	0.290
****** Final Hydro.	293.00	1887.4	0.0	109.68		

*** TOOL DIAGRAM *** CONV. STRADDLE

WELL NAME: Spangenberg #1 OWWO

LOCATION : 33-22S-12W, Stafford KS

TICKET No. 9419 D.S.T. No. 1 DATE 07/20/96

TOTAL TOOL TO BOTTOM OF TOP PACKERS 29

INTERVAL TOOL 25

BOTTOM PACKERS AND ANCHOR 62

TOTAL TOOL 116

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands 1 Single Total 62

TOTAL ASSEMBLY 178

D.C. ABOVE TOOLS.Stands8 Single Total 485

D.P. ABOVE TOOLS.Stands50 Single 1 Total 3110

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3773

TOTAL DEPTH 3762

TOTAL DRILL PIPE ABOVE K.B. 11

REMARKS:

