HALLIBURTON

QUAD COMBO
HRI/BCS/SDL/DSN
TRUE VERTICAL DEPTH
2"=100'

COMPANY	ENERFIN RESOURCES
WELL	CC 22-3-65 "THREE FINGER JACK"
FIELD	MIST
COUNTY	COLUMBIA
STATE	OR

Location: X: 1290595
Y: 874598

Elevations: K.B.: 1102.0' R.T.: -------- G.L.: 1088.0'

Date Processed	OCT-27-2007	Logs Processed	QUAD
Job Number	5451644	Date Logged	OCT-27-2007
Interval Processed	3837'-526'	Type Fluid In Hole	CYPAN
Processed By	G. ROUSSEAU	Location	WDLD
Processed At	WELLSITE		

--- COMPUTER PROCESSED PRODUCT ---

Fold Here

Service Ticket No.:	5451644	API Serial No.:	36-009-00368	PGM Version:	XL v5.8

DIRECTIONAL INFORMATION

Maximum Deviation	47.56	deg. @	2613.0'	KOP	614.0'

Remarks:

ANNULAR HOLE VOLUME CALCULATED USING 4.500" CASING.

HRID-BCSD-SDLT-ML-DSNT-NGRT-RWCH RUN IN COMBINATION.

CREW: J. CABRERA, I. PYLES. RIG: TD DRILLING NO. 101.

HALLIBURTON DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF THE LOG DATA, CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS OR RECOMMENDATIONS WHICH MAY BE GIVEN BY HALLIBURTON PERSONNEL OR WHICH APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA, INTERPRETATIONS, CONVERSIONS, OR RECOMMENDATIONS AGREES THAT HALLIBURTON IS NOT RESPONSIBLE EXCEPT WHERE DUE TO GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, FOR ANY LOSS, DAMAGES, OR EXPENSES RESULTING FROM THE USE THEREOF.

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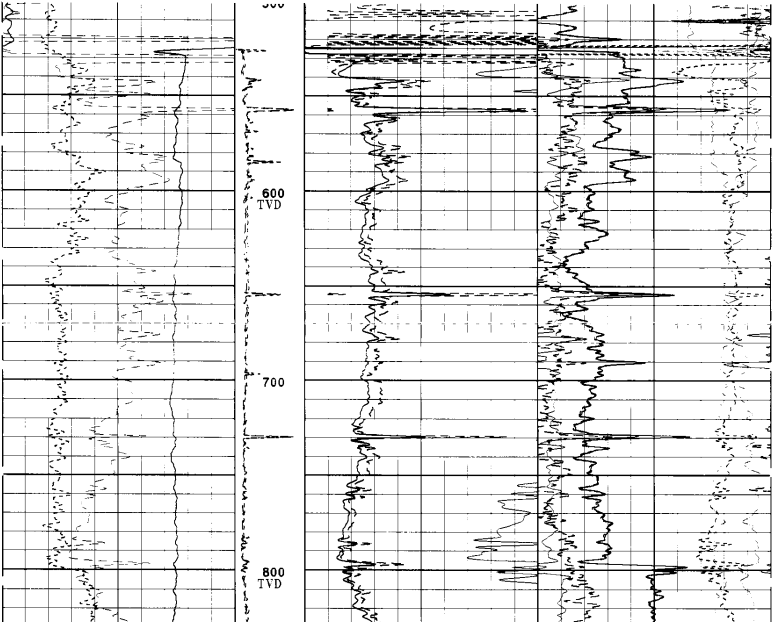
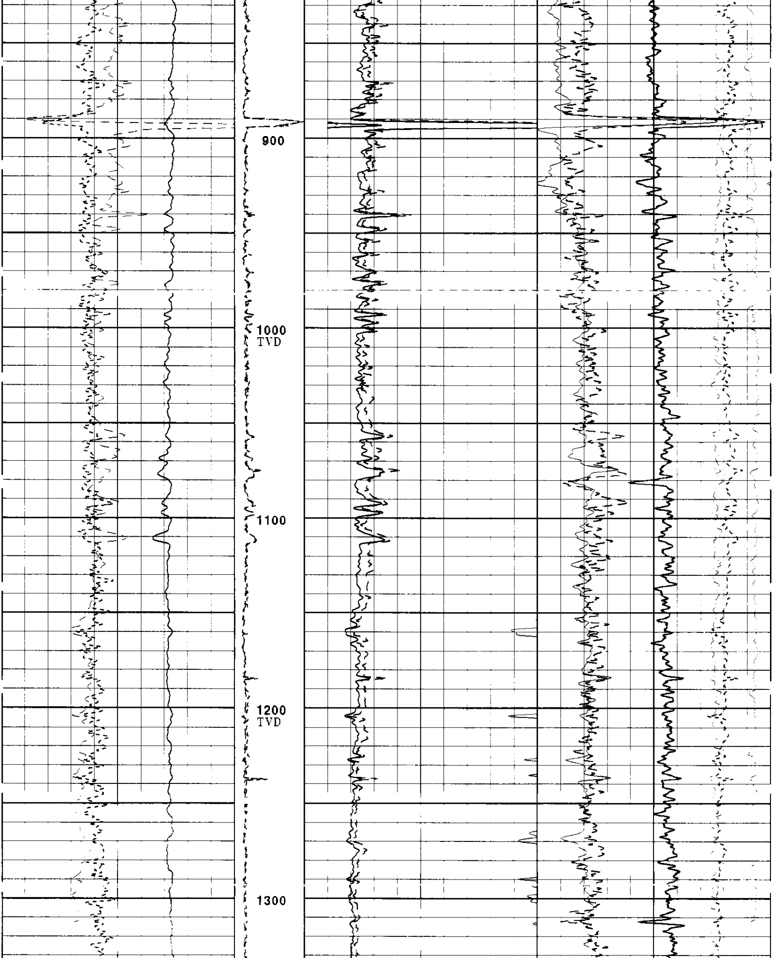
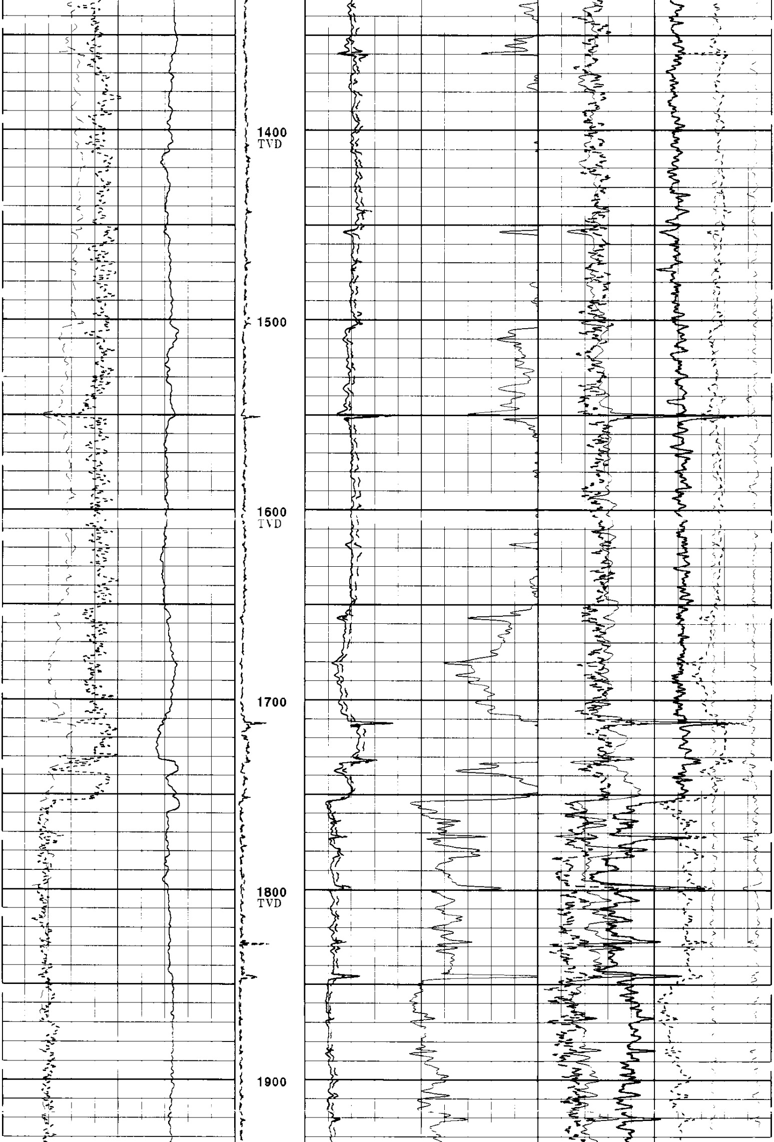
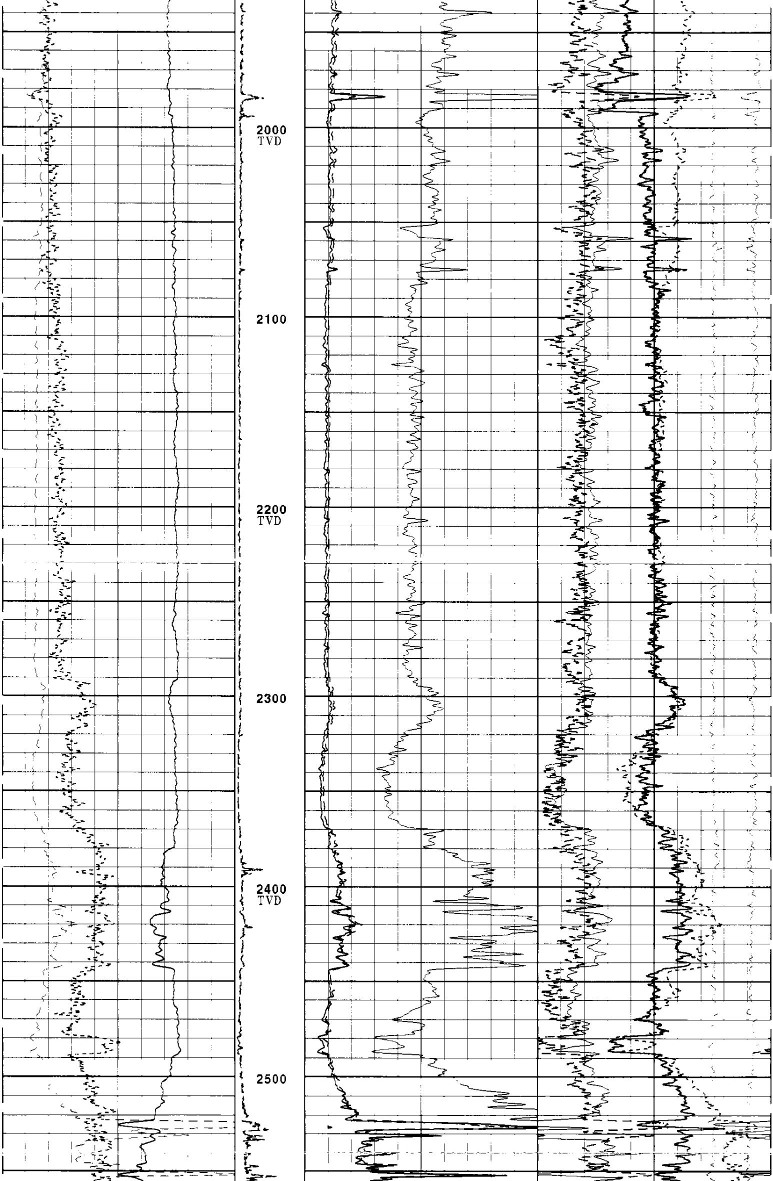
Version No: | hc:3.0
Data File: ener_3_fin_j_qu.3_tvd.cls
Format File: tvd.spc
Plot Time: 2007-10-27 15:21:42
Database Time: 15:19:08
Top Depth: 500.00
Bottom Depth: 3049.24

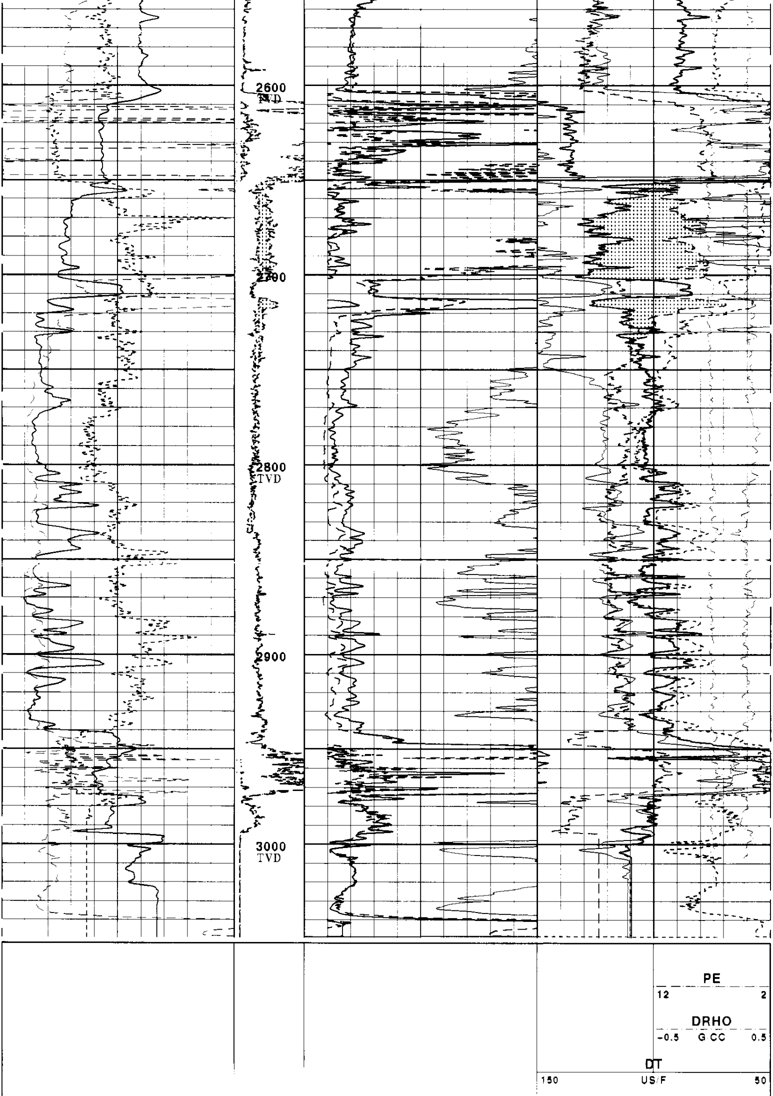
GR 0 API 200	NOR 0 OHMM 20	HDR1 0 OHMM 20	NPHI 60. % 0
SP -]10[+	LAT 0 OHMM 20	DFL 0 OHMM 20	DPHI 60. % 0
RWA 0 OHMM 3	1:600 FT.	AMP DFL 0 OHMM 4	RHOB 1.65 G/CC 2.65
			HDC1 1000 MMHO 0
			DT 150 US/F 50
			DRHO -0.5 G/CC 0.5
			PE 12 2











			HDC1 1000 MMHO 0
RWA 0 OHMM 3	1:600 FT.	AMP DFL 0 OHMM 4	RHOB 1.65 G/CC 2.65
SP -]10[+	LAT 0 OHMM 20	DFL 0 OHMM 20	DPHI 60. % 0
GR 0 API 200	NOR 0 OHMM 20	HDR1 0 OHMM 20	NPHI 60. % 0

HALLIBURTON

Version No: | hc:3.0
Data File: ener_3_fln_j_qu.3_tvd.cls
Format File: tvd.spc
Plot Time: 2007-10-27 15:21:33
Database Time: 15:19:08
Top Depth: 500.00
Bottom Depth: 3049.24

RECORD OF TVD SURVEY
Date: 27-Oct-2007 15:16:
Calculated by Desktop Petrophysics TVD, Minimum Curvature Method

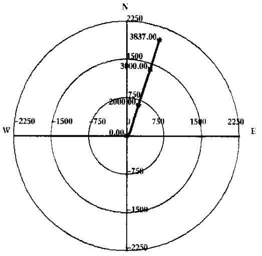
MEAS. DEPTH (FT)	DRIFT ANGLE (DEG)	T.V.D. (FT)	HOLE BEARING (DEG)	COURSE COORDINATES NORTH SOUTH (FT) (FT)	COURSE COORDINATES EAST WEST (FT) (FT)	TOTAL COORDINATES NORTH SOUTH (FT) (FT)	TOTAL COORDINATES EAST WEST (FT) (FT)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
137.00	0.26	137.00	185.79	-0.21	-0.02	-0.21	-0.02
228.00	0.26	228.00	58.85	-0.10	0.16	-0.31	0.14
320.00	0.10	320.00	121.15	0.07	0.25	-0.24	0.39
411.00	0.00	411.00	19.04	-0.04	0.07	-0.28	0.46
506.00	0.24	506.00	252.58	-0.06	-0.19	-0.34	0.27
614.00	5.69	613.83	72.39	1.55	4.89	1.21	5.16
677.00	10.53	676.18	71.70	2.75	8.45	3.96	13.61
740.00	14.16	737.72	61.81	5.45	12.26	9.41	25.87
772.00	14.87	768.70	56.21	4.13	6.86	13.54	32.73
804.00	15.19	799.61	49.70	5.00	6.61	18.54	39.34
836.00	15.37	830.48	43.42	5.79	6.11	24.33	45.45
868.00	15.65	861.32	36.96	6.53	5.51	30.86	50.96
899.00	16.00	891.15	31.20	7.00	4.73	37.86	55.69
931.00	16.12	921.90	24.80	7.81	4.15	45.67	59.84
963.00	17.07	952.57	22.18	8.38	3.64	54.05	63.48
995.00	17.16	983.15	21.19	8.75	3.48	62.80	66.96
1027.00	18.57	1013.61	21.32	9.15	3.56	71.95	70.52
1059.00	19.75	1043.84	20.49	9.81	3.75	81.76	74.27
1091.00	20.98	1073.84	18.62	10.49	3.72	92.25	77.99
1122.00	22.33	1102.65	16.84	10.90	3.48	103.15	81.47
1154.00	23.82	1132.09	16.81	12.00	3.63	115.15	85.10
1186.00	24.45	1161.29	17.50	12.50	3.86	127.65	88.96
1218.00	23.91	1190.48	18.53	12.46	4.05	140.11	93.01
1250.00	25.07	1219.60	19.26	12.55	4.30	152.66	97.31
1282.00	26.21	1248.45	20.03	13.04	4.66	165.70	101.97
1313.00	27.57	1276.10	19.32	13.20	4.72	178.90	106.69
1344.00	29.24	1303.37	18.68	13.94	4.80	192.84	111.49
1376.00	30.58	1331.11	18.19	15.14	5.04	207.98	116.53
1408.00	31.52	1358.52	18.91	15.65	5.25	223.63	121.78
1440.00	32.96	1385.59	18.90	16.15	5.53	239.78	127.31
1471.00	34.33	1411.40	18.81	16.25	5.55	256.03	132.86
1502.00	35.91	1436.76	18.37	16.90	5.68	272.93	138.54
1535.00	37.42	1463.23	16.25	18.81	5.86	291.74	144.40
1567.00	39.24	1488.33	16.26	19.05	5.55	310.79	149.95
1598.00	40.24	1512.17	17.10	18.98	5.69	329.77	155.64
1631.00	41.35	1537.15	18.42	20.53	6.58	350.30	162.22
1662.00	43.12	1560.10	18.96	19.74	6.68	370.04	168.90
1693.00	44.91	1582.39	18.42	20.40	6.90	390.44	175.80
1725.00	46.52	1604.73	17.25	21.81	7.01	412.25	182.81
1757.00	46.50	1626.75	16.95	22.19	6.83	434.44	189.64
1789.00	47.04	1648.67	16.90	22.31	6.79	456.75	196.43
1820.00	47.00	1669.80	17.20	21.68	6.65	478.43	203.08
1852.00	46.97	1691.63	17.53	22.33	6.98	500.76	210.06
1884.00	47.01	1713.46	17.09	22.34	6.96	523.10	217.02
1947.00	46.77	1756.51	16.73	44.00	13.38	567.10	230.40
2011.00	46.80	1800.33	18.23	44.49	14.01	611.59	244.41
2074.00	46.19	1843.70	17.41	43.50	13.99	655.09	258.40
2138.00	45.90	1888.12	17.11	44.00	13.67	699.09	272.07
2200.00	46.38	1931.08	18.09	42.61	13.52	741.70	285.59
2296.00	46.87	1997.01	19.46	66.06	22.46	807.76	308.05
2391.00	46.17	2062.38	19.42	65.00	22.94	872.76	330.99
2422.00	46.80	2083.72	19.46	21.20	7.48	893.96	338.47
2518.00	48.07	2148.66	18.28	66.90	22.86	960.86	361.33

2613.00	47.55	2212.46	18.51	66.79	22.21	1027.65	383.54
2709.00	47.28	2277.42	18.83	66.96	22.63	1094.61	406.17
2804.00	46.96	2342.06	19.03	65.85	22.58	1160.46	428.75
2899.00	46.02	2407.47	19.55	65.03	22.76	1225.49	451.51
2995.00	47.09	2473.49	17.96	66.00	22.40	1291.49	473.91
3090.00	46.84	2538.32	17.32	66.17	21.04	1357.66	494.95
3161.00	46.84	2586.89	17.55	49.41	15.52	1407.07	510.47
3202.00	46.84	2614.94	17.55	28.52	9.02	1435.59	519.49
3837.00	46.84	3049.30	17.55	441.64	139.67	1877.23	659.16

MAGNETIC DECLINATION (Directional Offset) = 0.00
CLOSURE DISTANCE = 1989.59 FEET
CLOSURE ANGLE = 19.35 DEGREE

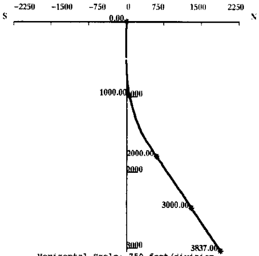
Hole Bearing is corrected for Magnetic Declination (Directional Offset).

TVD CROSS SECTION LOOKING DOWN



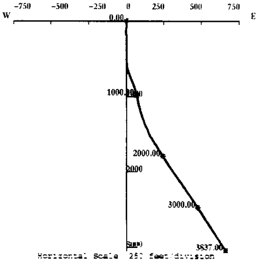
Scale: 750 feet/division

TVD CROSS SECTION LOOKING WEST



Horizontal Scale: 750 feet/division
Depth Scale: 1000 feet/division

TVD CROSS SECTION LOOKING NORTH



Horizontal Scale: 250 feet/division
Depth Scale: 1000 feet/division

COMPANY	ENERFIN RESOURCES		
WELL	CC 22-3-65 "THREE FINGER JACK"		
FIELD	MIST		
COUNTY	COLUMBIA	STATE	OR

HALLIBURTON

QUAD COMBO
HRI/BCS/SDL/DSN
TRUE VERTICAL DEPTH
2"=100'