

BTA Oil Producers

Shipp B 9206 JV-P

#1-D

SHL = 780/W + 600/W

15-17s-37e

BHL = 755/W + 536/W

15-17s-37e

PAGE: 1

D.I.G INC.
MIDLAND, TEXAS

JOB NUMBER: G-3111

WELL NAME: SHIPP B WELL NO.1

INRUN SURVEY
BY MINIMUM CURVATURE

NEAR. DEPTH	VERT. DEPTH	VERT. SECT.	L/R CLOS.	INCL	BEARING	COORDINATES		D-LEG /100	D-LEG /CL	STATION DISPLACEMENT	
						LATITUDE	DEPARTURE			DISP.	DIRECTION
100.0	100.00	0.62	-0.195	00.75	866.05W	0.27 8	0.60 W	0.75	0.75	0.65 AT	866.05W
200.0	199.99	1.67	-0.497	00.50	869.06W	0.69 8	1.60 W	0.25	0.25	1.74 AT	866.80W
300.0	299.99	2.43	-0.887	00.50	843.07W	1.16 8	2.31 W	0.22	0.22	2.59 AT	863.28W
400.0	399.98	3.21	-1.650	00.75	836.08W	2.01 8	2.99 W	0.26	0.26	3.60 AT	866.11W
500.0	499.97	3.69	-2.784	00.75	802.91E	3.19 8	3.34 W	0.50	0.50	4.62 AT	846.33W
600.0	599.96	3.97	-4.277	01.00	609.10W	4.71 8	3.45 W	0.31	0.31	5.84 AT	836.23W
700.0	599.95	4.40	-5.743	00.75	810.11W	5.21 8	3.70 W	0.25	0.25	7.23 AT	830.79W
800.0	799.94	4.54	-7.023	00.75	810.88E	7.50 8	3.69 W	0.27	0.27	8.36 AT	826.22W
900.0	899.93	4.24	-8.281	00.75	828.87E	8.72 8	3.25 W	0.23	0.23	9.30 AT	820.47W
1000.0	999.92	4.29	-9.937	01.25	609.14W	10.37 8	3.11 W	0.80	0.80	10.82 AT	816.71W
1100.0	1099.90	4.80	-11.834	01.00	807.15W	12.31 8	3.39 W	0.25	0.25	12.77 AT	815.41W
1200.0	1199.88	5.44	-13.438	01.00	823.17W	13.98 8	3.85 W	0.28	0.28	14.50 AT	815.38W
1300.0	1299.87	6.21	-15.000	01.00	816.18W	15.62 8	4.43 W	0.12	0.12	16.23 AT	815.84W
1400.0	1399.86	6.86	-16.377	00.75	822.19W	17.06 8	4.92 W	0.27	0.27	17.76 AT	816.09W
1500.0	1499.85	7.61	-17.707	01.00	823.20W	18.47 8	5.51 W	0.25	0.25	19.28 AT	816.62W
1600.0	1599.83	8.58	-18.850	00.75	847.21W	19.72 8	6.34 W	0.44	0.44	20.71 AT	817.82W
1700.0	1699.83	9.30	-19.629	00.50	819.28W	20.57 8	6.98 W	0.38	0.38	21.72 AT	818.69W
1800.0	1799.83	9.37	-20.202	00.25	840.71E	21.15 8	6.96 W	0.43	0.43	22.27 AT	818.22W
1900.0	1899.82	9.74	-20.804	00.75	843.31W	21.79 8	7.27 W	0.77	0.77	22.97 AT	818.45W
2000.0	1999.82	10.90	-21.145	00.75	889.68W	22.26 8	8.37 W	0.60	0.60	23.79 AT	820.61W
2100.0	2099.81	11.98	-21.013	00.50	889.67W	22.26 8	9.46 W	0.25	0.25	24.19 AT	823.03W
2200.0	2199.81	12.85	-20.968	00.50	882.34W	22.31 8	10.33 W	0.07	0.07	24.59 AT	824.85W
2300.0	2299.80	13.68	-21.499	00.75	830.20W	22.94 8	11.09 W	0.59	0.59	25.48 AT	825.81W
2400.0	2399.79	14.94	-22.014	01.00	883.91W	23.60 8	12.29 W	0.82	0.82	26.61 AT	827.51W
2500.0	2499.78	16.41	-21.726	00.75	871.38W	23.48 8	13.78 W	0.45	0.45	27.22 AT	830.41W
2600.0	2599.77	17.25	-20.845	00.75	829.67W	22.70 8	14.72 W	0.53	0.53	27.06 AT	832.96W
2700.0	2699.76	17.47	-19.589	00.75	802.96W	21.48 8	15.08 W	0.35	0.35	26.25 AT	835.07W
2800.0	2799.75	16.97	-18.468	00.75	837.75E	20.31 8	14.71 W	0.52	0.52	25.08 AT	835.92W
2900.0	2899.75	16.25	-17.648	00.50	829.46E	19.41 8	14.10 W	0.27	0.27	23.99 AT	835.99W
3000.0	2899.74	15.59	-16.779	00.75	831.18E	18.47 8	13.55 W	0.25	0.25	22.91 AT	836.25W
3100.0	3099.73	15.30	-15.616	00.75	815.85W	17.28 8	13.39 W	0.60	0.60	21.86 AT	837.76W
3200.0	3199.72	14.89	-14.260	01.00	828.86E	15.89 8	13.14 W	0.70	0.70	20.62 AT	839.60W
3300.0	3299.71	13.81	-12.893	01.00	834.58E	14.41 8	12.23 W	0.10	0.10	18.89 AT	840.32W
3400.0	3399.69	12.96	-11.183	01.25	808.29E	12.61 8	11.57 W	0.57	0.57	17.11 AT	842.55W
3500.0	3499.67	12.55	-9.486	00.75	803.99E	10.88 8	11.37 W	0.51	0.51	15.73 AT	846.28W
3600.0	3599.66	12.58	-7.982	01.00	816.30W	9.39 8	11.57 W	0.39	0.39	14.90 AT	850.95W



D.I.G INC.
MIDLAND, TEXAS

GYROSCOPIC DIRECTIONAL SURVEY
BY MINIMUM CURVATURE

FOR

* BTA OIL PRODUCERS *

JOB NUMBER: G-3111

WELL NAME: SHIPP B WELL NO. 1

LOCATION: LEA COUNTY, NEW MEXICO

SURVEY DATE: 9-16-95

SURVEY ENGINEER: BILL LAMB

GYRO REFERENCE BEARING: S81-00E
SURF. ELEVATION: R.K.B.

***** DEPTH MEASURED IN FEET *****

COMMENTS: GYRO 0-4500
HONDO DRILLING #11

*** THIS DIRECTIONAL SURVEY REPORT IS ***
 ** CORRECT TO THE BEST OF MY KNOWLEDGE ***
 * AND IS SUPPORTED BY ACTUAL FIELD DATA! *

 **
 **
 **
 **

COMPANY REPRESENTATIVE



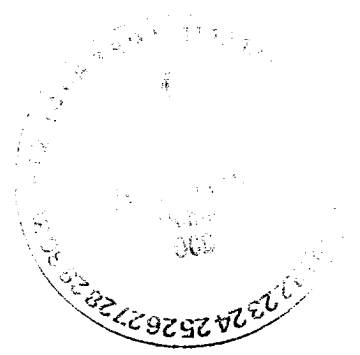
D.I.G., INC.

BTA OIL PRODUCERS
SHIPP B #1
LEA COUNTY, N.M.

Calculated by Minimum Curvature Method

- RECORD OF SURVEY -

MEASURED DEPTH (FT)	INCL ANGLE (DEG)	D R I F T DIRECTION (DEG)	COURSE LENGTH (FT)	TRUE VERTICAL DEPTH	T O T A L RECTANGULAR COORDINATES (FT)	C L O S U R E DISTANCE (FT)	DIRECTION (DEG)	DOGLEG SEVERITY (DG/100')
9781.00	1.00	N 26.00 W	0.00	9779.12	70.26 S 61.71 W	93.51	S 41.29 W	0.00
10270.00	0.50	S 19.00 E	489.00	10268.10	68.44 S 62.89 W	92.95	S 42.58 W	0.31
10665.00	0.50	S 18.00 W	395.00	10663.09	71.71 S 62.86 W	95.36	S 41.24 W	0.08
11160.00	0.25	S 11.00 W	495.00	11158.08	74.82 S 63.73 W	98.29	S 40.42 W	0.05
PROJECTION								
11575.00	0.50	S 11.00 W	415.00	11573.07	77.49 S 64.25 W	100.66	S 39.66 W	0.06



D.I.G. INC.
MIDLAND, TEXAS

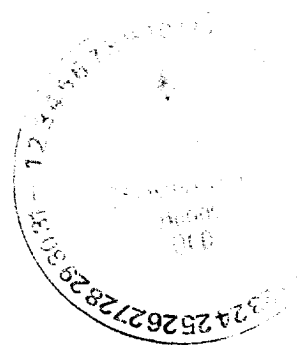
JOB NUMBER: M-3112

WELL NAME: SHIPP -B- #1

INRUN SURVEY
BY MINIMUM CURVATURE

MEAS. DEPTH	VERT. DEPTH	VERT. SECT.	L/R CLOS.	INCL	BEARING	COORDINATES		D-LEG /100	D-LEG /CL	STATION DISP.	DISPLACEMENT DIRECTION
						LATITUDE	DEPARTURE				
7873.0	7871.41	96.23	-14.130	01.00	S19.00W	81.63 S	52.88 W	0.29	0.28	97.26 AT	S32.94W
7948.0	7946.40	97.49	-14.393	01.00	S40.00W	82.75 S	53.51 W	0.49	0.36	98.54 AT	S32.89W
8038.0	8036.38	99.04	-14.591	01.00	S28.00W	84.04 S	54.39 W	0.23	0.21	100.10 AT	S32.91W
8131.0	8129.37	100.42	-14.854	00.75	S53.00W	85.12 S	55.25 W	0.48	0.45	101.49 AT	S32.93W
8225.0	8223.37	101.43	-14.581	00.50	S34.00W	85.83 S	55.98 W	0.34	0.32	102.47 AT	S33.11W
8319.0	8317.36	101.78	-14.829	00.25	S66.00E	86.26 S	56.02 W	0.63	0.60	102.85 AT	S33.00W
8413.0	8411.36	101.82	-15.205	00.25	S77.00E	86.39 S	55.83 W	0.05	0.05	102.75 AT	S32.78W
8505.0	8503.36	101.47	-15.575	00.25	S85.00E	86.52 S	55.25 W	0.06	0.05	102.66 AT	S32.56W
8600.0	8598.36	101.88	-16.184	00.75	S90.00E	87.23 S	55.06 W	0.72	0.68	103.15 AT	S32.26W
8695.0	8693.35	102.75	-16.689	00.50	S28.00W	88.21 S	55.26 W	0.41	0.39	104.09 AT	S32.06W
8789.0	8787.35	103.16	-16.579	00.25	N52.00W	88.45 S	55.81 W	0.63	0.60	104.48 AT	S32.15W
8882.0	8880.35	103.12	-15.567	01.00	N45.00W	87.75 S	56.35 W	0.81	0.75	104.29 AT	S32.71W
8975.0	8973.33	102.66	-13.828	01.25	N25.00W	86.26 S	57.35 W	0.50	0.46	103.58 AT	S33.62W
9067.0	9065.31	101.51	-12.234	01.25	N01.00W	84.35 S	57.79 W	0.56	0.52	102.25 AT	S34.42W
9161.0	9159.28	99.61	-11.077	01.50	N19.00E	82.16 S	57.41 W	0.57	0.54	100.23 AT	S34.94W
9253.0	9251.25	97.50	-9.942	01.50	N07.00E	79.82 S	56.87 W	0.34	0.31	98.01 AT	S35.47W
9347.0	9345.22	95.70	-8.303	01.50	N09.00W	77.39 S	56.91 W	0.44	0.42	96.06 AT	S36.33W
9442.0	9440.19	94.35	-6.474	01.25	N16.00W	75.16 S	57.39 W	0.32	0.30	94.57 AT	S37.36W
9539.0	9537.17	93.80	-4.738	01.00	N50.00W	73.60 S	58.33 W	0.72	0.70	93.91 AT	S38.40W
9628.0	9626.16	94.00	-3.209	01.00	N63.00W	72.75 S	59.52 W	0.25	0.23	94.06 AT	S39.34W
9719.0	9717.14	93.92	-1.282	01.50	N35.00W	71.41 S	61.01 W	0.85	0.78	93.93 AT	S40.51W
9781.0	9779.12	93.52	0.005	01.00	N26.00W	70.26 S	61.71 W	0.86	0.54	93.52 AT	S41.29W

* THE HORIZONTAL DISPLACEMENT AT THE DEPTH OF *
* 9781.0 FEET EQUALS 93.52 FEET AT S41.29W *



PAGE: 1

D.I.G. INC.
MIDLAND, TEXAS

JOB NUMBER: M-3112

WELL NAME: SHIPP -B- #1

INRUN SURVEY
BY MINIMUM CURVATURE

MEAS. DEPTH	VERT. DEPTH	VERT. SECT.	L/R CLOS.	INCL	BEARING	COORDINATES		D-LEG /100	D-LEG /CL	STATION DISPLACEMENT	
						LATITUDE	DEPARTURE			DISP.	DIRECTION
4500.0	4499.58	19.92	0.000	00.00	N00.00E	2.31 E	19.79 W	0.00		19.92 AT	883.34W
4522.0	4521.58	14.98	13.397	01.00	857.00W	2.41 E	19.95 W	4.55	1.00	20.10 AT	883.10W
4616.0	4615.57	16.47	14.038	01.00	872.00W	3.11 E	21.42 W	0.28	0.26	21.64 AT	881.73W
4708.0	4707.55	17.97	14.444	01.00	841.00W	3.97 E	22.71 W	0.58	0.53	23.05 AT	880.09W
4803.0	4802.54	19.53	14.436	01.00	841.00W	5.22 E	23.80 W	0.00	0.00	24.36 AT	877.63W
4898.0	4897.52	21.45	14.141	01.25	825.00W	6.78 E	24.78 W	0.42	0.40	25.69 AT	874.69W
4991.0	4990.50	23.43	13.781	01.25	837.00W	8.51 E	25.82 W	0.28	0.26	27.19 AT	871.75W
5082.0	5081.47	25.58	13.413	01.50	827.00W	10.37 E	26.96 W	0.38	0.35	28.88 AT	868.96W
5175.0	5174.44	27.91	12.730	01.50	923.00W	12.57 E	27.98 W	0.11	0.10	30.68 AT	865.81W
5301.0	5300.40	31.07	11.778	01.50	826.00W	15.57 E	29.35 W	0.06	0.08	33.23 AT	862.05W
5361.0	5360.38	32.54	11.248	01.50	817.00W	17.03 E	29.93 W	0.39	0.24	34.43 AT	860.36W
5452.0	5451.34	34.70	10.230	01.50	815.00W	19.32 E	30.58 W	0.06	0.05	36.17 AT	857.72W
5546.0	5545.32	36.64	9.093	01.25	806.00W	21.53 E	31.01 W	0.35	0.33	37.75 AT	855.23W
5640.0	5639.29	38.64	8.114	01.50	823.00W	23.68 E	31.60 W	0.51	0.48	39.48 AT	853.15W
5732.0	5731.25	41.15	7.413	01.75	828.00W	26.03 E	32.73 W	0.31	0.29	41.81 AT	851.50W
5827.0	5826.22	43.57	6.842	01.25	928.00W	28.22 E	33.89 W	0.53	0.50	44.11 AT	850.21W
5921.0	5920.19	45.72	6.179	01.50	821.00W	30.28 E	34.82 W	0.32	0.30	46.14 AT	848.99W
6011.0	6010.16	47.93	5.363	01.50	821.00W	32.48 E	35.66 W	0.00	0.00	48.23 AT	847.67W
6105.0	6104.13	50.29	4.695	01.50	830.00W	34.69 E	36.72 W	0.25	0.24	50.51 AT	846.62W
6196.0	6195.09	52.78	4.026	01.75	823.00W	37.00 E	37.85 W	0.35	0.32	52.94 AT	845.65W
6289.0	6288.05	55.49	3.182	01.75	825.00W	39.60 E	39.01 W	0.07	0.06	55.58 AT	844.57W
6383.0	6382.01	58.24	2.353	01.75	824.00W	42.21 E	40.20 W	0.03	0.03	58.29 AT	843.60W
6477.0	6475.96	60.97	1.476	01.75	823.00W	44.84 E	41.34 W	0.03	0.03	60.99 AT	842.68W
6572.0	6570.91	63.74	0.110	02.00	808.00W	47.82 E	42.14 W	0.58	0.55	63.74 AT	841.39W
6664.0	6662.86	66.52	-1.482	02.00	815.00W	50.96 E	42.78 W	0.27	0.24	66.54 AT	840.81W
6757.0	6755.81	69.25	-2.829	01.75	815.00W	53.90 E	43.57 W	0.27	0.25	69.30 AT	839.95W
6852.0	6850.76	71.96	-3.781	01.75	829.00W	56.57 E	44.65 W	0.45	0.43	72.06 AT	838.28W
6945.0	6943.71	74.92	-4.484	02.00	827.00W	59.28 E	46.07 W	0.28	0.26	75.06 AT	837.87W
7040.0	7038.67	77.62	-5.501	01.50	812.00W	61.95 E	47.08 W	0.71	0.67	77.81 AT	837.24W
7132.0	7130.63	80.12	-6.776	02.00	816.00W	64.67 E	47.78 W	0.66	0.51	80.40 AT	836.46W
7226.0	7224.58	82.85	-8.179	01.75	812.00W	67.65 E	48.53 W	0.30	0.28	83.28 AT	835.65W
7318.0	7316.54	85.23	-9.204	01.50	825.00W	70.12 E	49.33 W	0.48	0.44	85.73 AT	835.13W
7409.0	7407.51	87.42	-10.121	01.50	812.00W	72.36 E	50.08 W	0.37	0.34	88.00 AT	834.69W
7499.0	7497.49	89.13	-11.081	01.00	812.00W	74.28 E	50.49 W	0.56	0.50	89.81 AT	834.20W
7590.0	7588.47	90.69	-11.940	01.25	813.00W	76.02 E	50.87 W	0.28	0.25	91.48 AT	833.79W
7684.0	7682.45	92.54	-12.831	01.25	818.00W	78.00 E	51.42 W	0.12	0.11	93.42 AT	833.40W
7778.0	7776.43	94.46	-13.524	01.25	825.00W	79.90 E	52.17 W	0.16	0.15	95.43 AT	833.14W



D.I.G. INC.
MIDLAND, TEXAS

MAGNETIC DIRECTIONAL SURVEY
BY MINIMUM CURVATURE

FOR

* BTA OIL PRODUCERS *

JOB NUMBER: M-3112

WELL NAME: SHIPP -B- #1

LOCATION: LEA COUNTY, NEW MEXICO

SURVEY DATE: 9-16-95

SURVEY ENGINEER: BILL LAMB

MAGNETIC DECLINATION: 09.00E

TIE-ON COORDINATES AT: 4500 M.D.

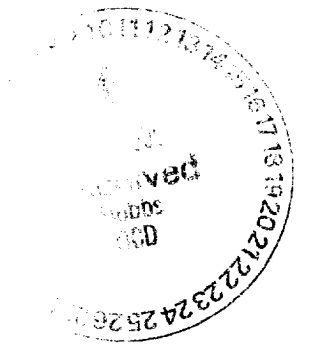
TAKEN FROM: GYRO

SURF. ELEVATION: R.K.B.

***** DEPTH MEASURED IN FEET *****

***** THIS DIRECTIONAL SURVEY REPORT IS ****
** CORRECT TO THE BEST OF MY KNOWLEDGE **
* AND IS SUPPORTED BY ACTUAL FIELD DATA! *
**
**
**
**
** COMPANY REPRESENTATIVE **

COMMENTS: MMS 4522-9781
HONDO DRILLING #11



PAGE: 2

D.I.G INC.
MIDLAND, TEXAS

JOB NUMBER: G-3111

WELL NAME: SHIPP B WELL NO.1

INRUN SURVEY
BY MINIMUM CURVATURE

MEAS. DEPTH	VERT. DEPTH	VERT. SECT.	L/R CLOG.	INCL	BEARING	COORDINATES		D-LEG /100	D-LEG /CL	STATION DISP.	DISPLACEMENT DIRECTION
						LATITUDE	DEPARTURE				
3700.0	3699.65	12.94	-6.502	00.75	N25.44W	7.96 S	12.10 W	0.29	0.29	14.48 AT	S56.56W
3800.0	3799.64	14.00	-5.208	01.25	N58.43W	6.79 S	13.31 W	0.74	0.74	14.94 AT	S62.95W
3900.0	3899.62	15.23	-3.741	01.00	N31.42W	5.40 S	14.69 W	0.58	0.58	15.68 AT	S69.55W
4000.0	3999.61	15.85	-2.345	00.75	N29.40W	4.16 S	15.47 W	0.25	0.25	16.02 AT	S74.93W
4100.0	4099.60	16.58	-1.293	00.75	N53.39W	3.20 S	16.31 W	0.31	0.31	16.63 AT	S78.89W
4200.0	4199.59	17.41	-0.598	00.50	N62.38W	2.61 S	17.23 W	0.27	0.27	17.42 AT	S81.38W
4300.0	4299.59	17.99	-0.303	00.25	N83.37W	2.38 S	17.83 W	0.28	0.28	17.99 AT	S82.39W
4400.0	4399.58	19.06	-0.127	01.00	N88.36W	2.33 S	18.92 W	0.75	0.75	19.06 AT	S82.97W
4500.0	4499.58	19.92	-0.001	00.00	N00.00E	2.31 S	19.79 W	1.00	1.00	19.92 AT	S83.35W

*
* THE HORIZONTAL DISPLACEMENT AT THE DEPTH OF *
* ***** *
* 4500.0 FEET EQUALS 19.92 FEET AT S83.35W *
* ***** *

