

DI DRIL, INC.  
 BAKERSFIELD, CALIFORNIA  
 MAGNETIC DIRECTIONAL SURVEY  
 BY ANGLE AVERAGE METHOD

FOR

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 \* NAHAMA & WEAGANT ENERGY CO. \*  
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JOB NUMBER: B 6840  
 WELL NAME: Wilson  
 FISHHAWK 11-A-5-65 Reckell  
 LOCATION: MIST FIELD  
 SURVEY DATE: 26 OCTOBER 1992  
 SURVEY ENGINEER: RON STOCKTON  
 MAGNETIC DECLINATION: 20.00E  
 TIE-ON COORDINATES AT: O M.D.  
 TAKEN FROM: SURVEY DATA SHEET

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 \*\*\*\*\* DEPTH MEASURED IN FEET \*\*\*\*\*  
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 COMMENTS: ASSUMED VERTICAL @ 509' \* THIS DIRECTIONAL SURVEY REPORT IS \*  
 DATA PROJECTED @ 2485' \* AND IS SUPPORTED BY ACTUAL FIELD DATA \*  
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 \*\* COMPANY REPRESENTATIVE  
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PAGE:

DI DRIL, INC.  
 BAKERSFIELD, CALIFORNIA

JOB NUMBER: B 6840 WELL NAME: FISHHAWK 11-A-5-66  
 INRUN SURVEY  
 BY ANGLE AVERAGE METHOD

MEAS. DEPTH	VERT. DEPTH	VERT. SECT.	INCL	BEARING	COORDINATES		D-LEG /100	D-LEG /CL	STATION DISPLACEMENT	
					LATITUDE	DEPARTURE			DISP.	DIRECTION
0.0	0.00	0.00	00-00	N00-00E	0.00 N	0.00 E	0.00		0.00	AT N00-00E
509.0	509.00	0.00	00-00	S01-00W	0.00 N	0.00 E	0.00	0.00	0.00	AT N00-00E
614.0	614.00	0.27	00-30	S01-00W	0.46 S	0.01 W	0.48	0.50	0.46	AT S01-00W
677.0	676.98	1.84	02-30	S70-00W	1.80 S	0.97 W	3.76	2.37	2.04	AT S28-12W
737.0	736.84	5.74	05-15	S70-00W	3.19 S	4.78 W	4.58	2.75	5.74	AT S56-17W
799.0	798.41	12.77	08-15	S69-00W	5.74 S	11.60 W	4.84	3.00	12.94	AT S63-41W
862.0	860.61	22.59	10-00	S60-00W	10.04 S	20.62 W	3.58	2.25	22.93	AT S64-02W
923.0	920.39	34.72	13-00	S57-00W	16.40 S	30.99 W	5.01	3.06	35.06	AT S62-07W
1100.0	1093.28	72.46	11-45	S63-00W	35.36 S	63.84 W	1.01	1.79	72.98	AT S61-01W
1256.0	1245.94	104.13	12-00	S64-00W	49.69 S	92.57 W	0.21	0.32	105.06	AT S61-47W
1417.0	1403.71	135.16	11-00	S74-00W	61.19 S	122.53 W	1.38	2.23	136.96	AT S63-28W
1571.0	1554.94	162.97	10-45	S68-00W	70.65 S	150.01 W	0.75	1.16	165.81	AT S64-47W
1790.0	1770.36	200.92	10-00	S72-00W	84.14 S	187.07 W	0.47	1.04	205.12	AT S65-47W
1951.0	1928.97	228.04	09-45	S58-00W	95.81 S	212.09 W	1.50	2.41	232.73	AT S65-41W
2014.0	1990.94	239.38	11-00	S51-00W	102.39 S	221.33 W	2.81	1.77	243.87	AT S65-10W
2077.0	2052.79	251.31	11-00	S43-00W	110.59 S	230.12 W	2.42	1.53	255.32	AT S64-20W
2138.0	2112.51	263.45	12-30	S41-00W	119.82 S	238.43 W	2.55	1.55	266.85	AT S63-19W
2200.0	2172.88	277.32	14-00	S42-00W	130.47 S	247.85 W	2.45	1.52	280.09	AT S62-14W
2263.0	2233.78	293.00	15-30	S42-00W	142.39 S	258.58 W	2.38	1.50	295.19	AT S61-10W
2325.0	2293.30	309.89	17-00	S40-00W	155.48 S	269.96 W	2.58	1.60	311.54	AT S60-04W
2418.0	2381.82	337.57	18-45	S40-00W	177.35 S	288.31 W	1.88	1.75	338.49	AT S58-24W
2485.0	2445.26	358.45	18-45	S40-00W	193.85 S	302.16 W	0.00	0.00	358.99	AT S57-19W
2770.0	2715.73	446.10	18-00	S43-00W	261.13 S	361.69 W	0.42	1.21	446.10	AT S54-10W

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 \* THE HORIZONTAL DISPLACEMENT AT THE DEPTH OF \*  
 \* 2770.0 FEET EQUALS 446.10 FEET AT S54-10W \*  
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