

## **Cementers Well Information Sheet**

**Well Name: Pharaoh 1N ( Well 1 Of 5 )**

**AFE#: DC003115**

**API#: 05-123-48835**

**Surface Casing Set At: 1,675'**

**Formation: Niobrara**

**Estimated TD: 16,757'**

**Estimated TVD at TD: 6,638'**

**Top Of Lead Cement: 500'**

**Top Of Tail Cement: 5,933'**

**Production Casing Type: 5 ½" BTC #20**

**\*\*\* Please Note: TD and TVD are based off drilling plan and has the possibility of changing. Any significant changes in depths will be communicated to Cement Company\*\*\***



## US Treatment Report

**Customer:** PDC Energy  
**Rep:** Brady Sharp  
**Supervisor:** Vitalijs Neverdasovs  
**Job Type:** US Primary  
 Casing-Production

**Rig:** Ensign 142  
**Well:** PHARAOH 1N  
**UWI:** PHARAOH 1N  
**Surface:**

**Job #:** JOB00092334  
**Job Date:** Dec 31 @ 14:00  
**Time Requested:** Dec 31 @ 14:00  
**Time Arrived:** Dec 31 @ 14:00  
**Time Released:** Jan 01 @ 03:30

### Scavenger

62.82 sk MAG EV 12.9 + 0.80% MCR-3 + 0.50% MCR-1 + 0.70% MCFL-7 + 1.00% MCFW-1 + 0.50% MCGC-1 + 0.20% MCDP-P  
 Weight: 12.5lb/gal

Yield: 1.7 ft<sup>3</sup>/sk = 19bbls      Mix Water: 8.98 gal/sk = 564.02 gal

844.7 sk MAG EV 12.9 + 0.80% MCR-3 + 0.50% MCR-1 + 0.70% MCFL-7 + 1.00% MCFW-1 + 0.50% MCGC-1 + 0.20% MCDP-P

Yield: 1.53 ft<sup>3</sup>/sk = 230.17bbls      Mix Water: 7.72 gal/sk = 6520.93gal

1839.9 sk MAG EV 13.7 + 0.50% MCA-2 + 0.35% MCR-H + 0.30% MCI-2 + 0.80% MCFL-7 + 0.30% MCFR-2 + 0.50% MCFW-1 + 0.50% MCGC-1 + 0.20% MCDP-P

Yield: 1.35ft<sup>3</sup>/sack = 442.38bbls      Mix Water: 6.40gal/sack = 11775.36gal

BHCT (F)	215	BHST (F)	215	Surface Casing Casing Size (in)	9.625
Surface Casing Grade	J-55	Surface Casing Weight (lb/ft)	36	Production Casing Casing Size (in)	5.5
Production Casing Grade	HCP-110	Production Casing Weight (lb/ft)	20	Collapse Csg Pressure (psi)	11080
Float Depth (ft)	16705'	Funnel Vis (sec/qt)	51	Hole Size (in)	8.5
Max Csg Pressure (psi)	12640	Max Pressure (psi)	3200	Mud Density (lb/gal)	10.5
Mud Type	OBM	Plug Type	Rig	TMD (ft)	16751'
TVD (ft)	6616'	Unkown UDF	Supply Product ion Casing	Unkown UDF	Surface Casing

Treatment Info:      Sacks Used: 0      Sacks Not Used: 0

Preflush: 38bbls MAG Sweep-H + MAG Clean-1 & 19bbls MAG Sweep-H

Displace: 10bbls Inhibited Water & 360.9bbls Fresh Water

Circulation Time: 4.5

Slurry Temp: 65      Bulk Sample: Yes

Water Temp: 68      Water Sample: Yes

Bulk Temp: 55      Slurry Sample: Yes

Air Temp: 32      Air Pressure 29.9

Slurry Returns: 0 Plug Bumped: Yes Pump Out Lines: Yes      Float Held: Yes

Cement Class: Type III      Humidity: 62      Precipitation: 0

Time	Pressure psi	Annular Pressure psi	Volume Per Stage bbls	Total Stage Volume bbls	Rate bbls/mi n	Treatment Detail
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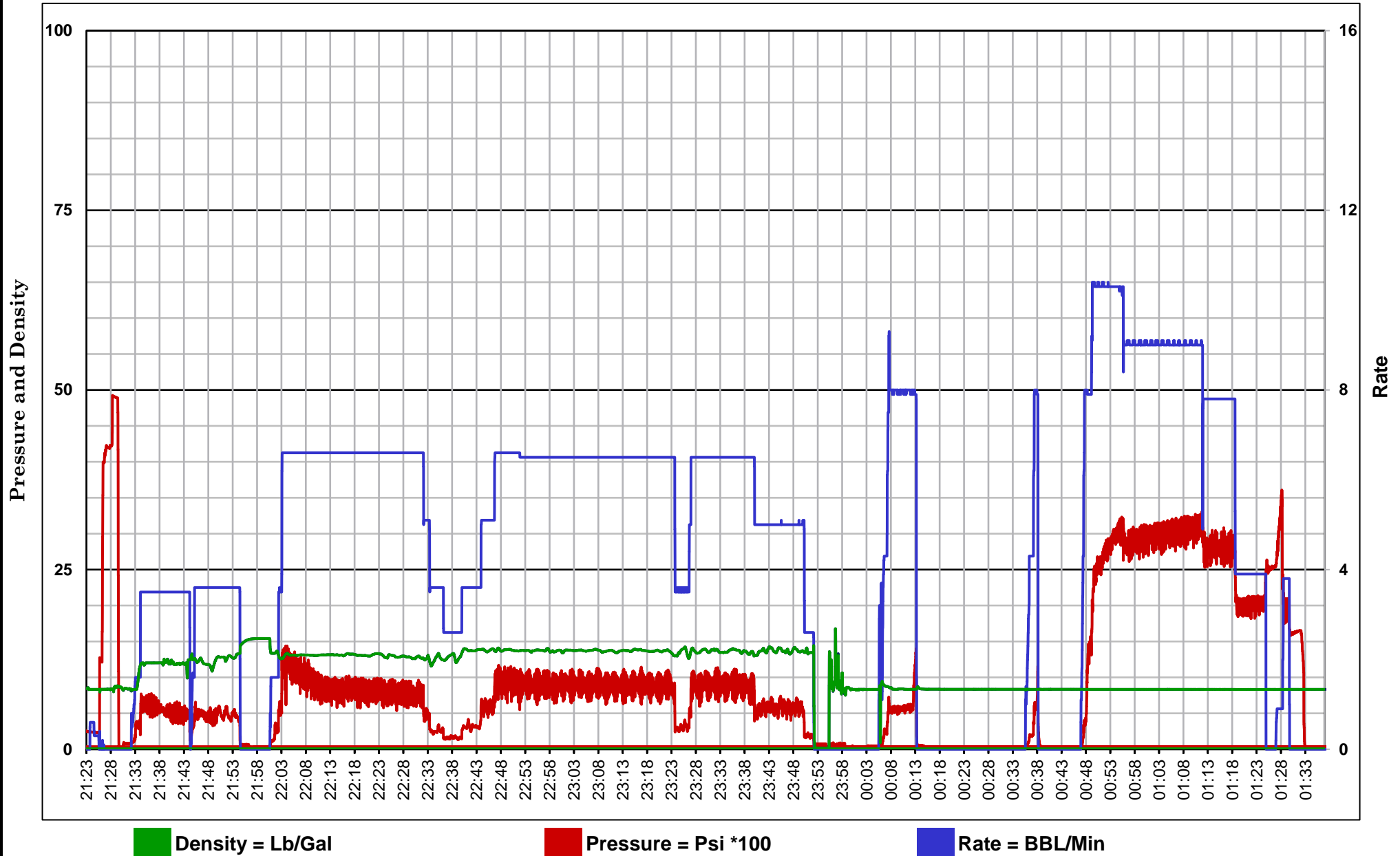
13:30	0.00					Arrive on Location - CUSTOMER REQUESTED CREW @ 14:00. RIG IS RUNNING CASING
20:30	0.00					Safety Meeting - HELD PRE JOB SAFETY MEETING.
21:00	0.00					Drop Plug - DROP FIRST BOTTOM PLUG
21:22	4,890.00		2		.5	Start Pressure Test - LOAD LINE AND TEST TO 4890 PSI
21:31	650.00		38		3.5	Pump Preflush - BATCH/WEIGHT/PUMP MAG SWEEP H + MAG CLEAN 1 @ 11.5 PPG
21:44	501.00		19		3.5	Pump Preflush - BATCH/WEIGHT/PUMP MAG SWEEP H @ 12.0 PPG
21:48	400.00		19		3.5	Pump Scavenger - WEIGHT/PUMP SCAVENGER @ 12.5 PPG
21:53	0.00					Stop Pumping - DROP SECOND BOTTOM PLUG
21:58	650.00		230		6.5	Pump Slurry - BATCH/WEIGHT/PUMP MAG EV 12.9 PPG LEAD. CALCULATED TOP OF LEAD @ 469'.
22:39	900.00		442.4		6.5	Pump Slurry - WEIGHT/PUMP MAG EV 13.7 PPG TAIL. CALCULATED TOP OF TAIL @ 5895'.
23:51	0.00					Stop Pumping - FINISHED PUMPING CEMENT.
23:53	0.00					Wash Up Truck - WASH PUMPS AND LINES. BLOW DOWN LINES USING RIG AIR.
00:01	0.00					Drop Plug - DROP TOP PLUG.
00:03	1,200.00		50		8.0	Displace - FIRST 10 BBLS WITH SUGAR. REMAINING WITH BIOCID. LAST 40 FRESH WATER.
00:12	0.00					Stop Pumping - PER CUSTOMER SHUTDOWN. CRT CUP SEAL HAS LEAK. RIG HANDS REPLACING SEAL.
00:34	0.00					Displace - CAME ON LINE/ CRT SEAL STILL LEAKING. PER CUSTOMER REMOVE CRT AND SWAGE UP TOP DRIVE DIRECTLY TO THE CASING.
00:46	3,050.00		280		10.0	Displace - WENT BACK TO DISPLACEMENT.
01:19	2,150.00		40.9		4	Slow Rate Pumping - SLOW RATE
01:24	2,558.00		370.9			Bump Plug - BUMP PLUG WITH 500 PSI OVER FINAL CIRCULATING PRESSURE. 51 BBLS OF SPACER BACK TO SURFACE.
01:27	3,650.00		5		1	PRESSURE UP/ SHIFT TOOL AND PUMP 5 BBLS WET SHOE.
01:29	1,632.00					Stop Pumping - SHUTDOWN.
01:32	0.00					Check Floats - FLOATS HELD. 3 BBLS BACK.
02:00	0.00					Rig Out



Customer: PDC  
Date: 12/31/2020  
Ticket: 92334

Well Name: PHARAOH 1N  
UWI: KERSEY, CO  
Job Type: PRODUCTION

Unit  
1606



5.5" Casing									
WELL	PHARAOH 1N	DATE: 12/30/2020							
DEPTH (Ft)	16751.00	K.B. to Wellhead		28.00	Rat Hole	13.00	20.00		
SHOE (Ft)	16738.00	0.0293	Accumulated		0.02220	Mud Wt.	10.6	0.83816794	
Rack#	Description		Closed End Displacement (Bbls)	Capacity (Bbls)	Length (Ft)	Length Accum. (FT)	Top To RT (Ft)	Weight (k#)	Comments
	Float Shoe		0.055084	0.04	1.88	1.88	16736.12	0.03	10K SINGLE VALVE FLOAT SHOE
	Pup Joint		0.406684	0.31	12.00	13.88	16724.12	0.23	5.500" 20# PUP JOINT
	Float Collar #1		0.451513	0.34	1.53	15.41	16722.59	0.26	10K SINGLE VALVE FLOAT COLLAR
	Float Collar #2		0.496635	0.38	1.54	16.95	16721.05	0.28	10K SINGLE VALVE FLOAT COLLAR
	Pup Joint		0.829776	0.63	11.37	28.32	16709.68	0.47	5.500" 20# PUP JOINT
	Wet Shoe Sub		0.955766	0.72	4.30	32.62	16705.38	0.55	WET SHOE PINNED@1660 PSI
	Pup Joint		1.104903	0.84	5.09	37.71	16700.29	0.63	5.500" 20# PUP JOINT
	Ball Seat Sub		1.125413	0.85	0.70	38.41	16699.59	0.64	CASING TEST SUB 4.250" BALL SEAT
1	Casing Joints		2.423696	1.84	44.31	82.72	16655.28	1.39	1 8.25" COMPOSITE
2	Casing Joints		3.696781	2.80	43.45	126.17	16611.83	2.12	
3	Casing Joints		4.996236	3.79	44.35	170.52	16567.48	2.86	2 8.25" COMPOSITE
4	Casing Joints		6.295691	4.77	44.35	214.87	16523.13	3.60	
5	Casing Joints		7.549731	5.72	42.80	257.67	16480.33	4.32	3 8.25" COMPOSITE
6	Casing Joints		8.821351	6.68	43.40	301.07	16436.93	5.05	
7	Casing Joints		10.184094	7.72	46.51	347.58	16390.42	5.83	4 8.25" COMPOSITE
8	Casing Joints		11.461867	8.68	43.61	391.19	16346.81	6.56	
9	Casing Joints		12.736417	9.65	43.50	434.69	16303.31	7.29	5 8.25" COMPOSITE
10	Casing Joints		14.009502	10.61	43.45	478.14	16259.86	8.02	
	Marker E		14.699517	11.14	23.55	501.69	16236.31	8.41	6 8.25" COMPOSITE
11	Casing Joints		15.972602	12.10	43.45	545.14	16192.86	9.14	
12	Casing Joints		17.191482	13.03	41.60	586.74	16151.26	9.84	7 8.25" COMPOSITE
13	Casing Joints		18.466032	13.99	43.50	630.24	16107.76	10.56	
14	Casing Joints		19.742047	14.96	43.55	673.79	16064.21	11.29	8 8.25" COMPOSITE
15	Casing Joints		21.01689	15.92	43.51	717.30	16020.70	12.02	
16	Casing Joints		22.186253	16.81	39.91	757.21	15980.79	12.69	9 8.25" COMPOSITE
17	Casing Joints		23.421248	17.75	42.15	799.36	15938.64	13.40	
18	Casing Joints		24.692868	18.71	43.40	842.76	15895.24	14.13	10 8.25" COMPOSITE
19	Casing Joints		25.970348	19.68	43.60	886.36	15851.64	14.86	
20	Casing Joints		27.237573	20.64	43.25	929.61	15808.39	15.58	11 8.25" COMPOSITE
21	Casing Joints		28.512123	21.60	43.50	973.11	15764.89	16.31	
22	Casing Joints		29.788138	22.57	43.55	1016.66	15721.34	17.04	12 8.25" COMPOSITE
23	Casing Joints		31.055363	23.53	43.25	1059.91	15678.09	17.77	
24	Casing Joints		32.328448	24.49	43.45	1103.36	15634.64	18.50	13 8.25" COMPOSITE
25	Casing Joints		33.602998	25.46	43.50	1146.86	15591.14	19.23	
26	Casing Joints		34.808693	26.37	41.15	1188.01	15549.99	19.92	14 8.25" COMPOSITE
27	Casing Joints		36.080313	27.34	43.40	1231.41	15506.59	20.64	
28	Casing Joints		37.357793	28.31	43.60	1275.01	15462.99	21.37	15 8.25" COMPOSITE
29	Casing Joints		38.581068	29.23	41.75	1316.76	15421.24	22.07	
30	Casing Joints		39.854153	30.20	43.45	1360.21	15377.79	22.80	16 8.25" COMPOSITE
31	Casing Joints		41.133098	31.17	43.65	1403.86	15334.14	23.53	
32	Casing Joints		42.404718	32.13	43.40	1447.26	15290.74	24.26	17 8.25" COMPOSITE
33	Casing Joints		43.682198	33.10	43.60	1490.86	15247.14	24.99	
34	Casing Joints		45.043183	34.13	46.45	1537.31	15200.69	25.77	18 8.25" COMPOSITE
35	Casing Joints		46.314803	35.09	43.40	1580.71	15157.29	26.50	
36	Casing Joints		47.612793	36.08	44.30	1625.01	15112.99	27.24	19 8.25" COMPOSITE
37	Casing Joints		48.884413	37.04	43.40	1668.41	15069.59	27.97	
38	Casing Joints		50.150173	38.00	43.20	1711.61	15026.39	28.69	20 8.25" COMPOSITE
39	Casing Joints		51.426188	38.96	43.55	1755.16	14982.84	29.42	
40	Casing Joints		52.699273	39.93	43.45	1798.61	14939.39	30.15	21 8.25" COMPOSITE
41	Casing Joints		53.973823	40.89	43.50	1842.11	14895.89	30.88	
42	Casing Joints		55.190066	41.82	41.51	1883.62	14854.38	31.58	22 8.25" COMPOSITE
43	Casing Joints		56.463151	42.78	43.45	1927.07	14810.93	32.30	
44	Casing Joints		57.664451	43.69	41.00	1968.07	14769.93	32.99	23 8.25" COMPOSITE
45	Casing Joints		58.941931	44.66	43.60	2011.67	14726.33	33.72	
46	Casing Joints		60.215016	45.62	43.45	2055.12	14682.88	34.45	24 8.25" COMPOSITE
47	Casing Joints		61.470521	46.57	42.85	2097.97	14640.03	35.17	
48	Casing Joints		62.755326	47.55	43.85	2141.82	14596.18	35.90	25 8.25" COMPOSITE
49	Casing Joints		64.033099	48.52	43.61	2185.43	14552.57	36.64	
50	Casing Joints		65.259304	49.45	41.85	2227.28	14510.72	37.34	26 8.25" COMPOSITE
51	Casing Joints		66.533854	50.41	43.50	2270.78	14467.22	38.07	
52	Casing Joints		67.818659	51.38	43.85	2314.63	14423.37	38.80	27 8.25" COMPOSITE
53	Casing Joints		68.983334	52.27	39.75	2354.38	14383.62	39.47	
54	Casing Joints		70.232979	53.21	42.65	2397.03	14340.97	40.18	28 8.25" COMPOSITE
55	Casing Joints		71.504892	54.18	43.41	2440.44	14297.56	40.91	
56	Casing Joints		72.758932	55.13	42.80	2483.24	14254.76	41.63	29 8.25" COMPOSITE
57	Casing Joints		73.973417	56.05	41.45	2524.69	14213.31	42.32	
58	Casing Joints		75.177647	56.96	41.10	2565.79	14172.21	43.01	30 8.25" COMPOSITE
59	Casing Joints		76.454541	57.93	43.58	2609.37	14128.63	43.74	
60	Casing Joints		77.738174	58.90	43.81	2653.18	14084.82	44.48	31 8.25" COMPOSITE
61	Casing Joints		78.959984	59.83	41.70	2694.88	14043.12	45.18	
62	Casing Joints		80.300459	60.84	45.75	2740.63	13997.37	45.94	32 8.25" COMPOSITE
63	Casing Joints		81.493262	61.75	40.71	2781.34	13956.66	46.62	
64	Casing Joints		82.713314	62.67	41.64	2822.98	13915.02	47.32	33 8.25" COMPOSITE
65	Casing Joints		83.948309	63.61	42.15	2865.13	13872.87	48.03	
66	Casing Joints		85.152539	64.52	41.10	2906.23	13831.77	48.72	34 8.25" COMPOSITE
67	Casing Joints		86.438223	65.49	43.88	2950.11	13787.89	49.45	

68	Casing Joints		87.695779	66.45	42.92	2993.03	13744.97	50.17	35 8.25" COMPOSITE
69	Casing Joints		88.982342	67.42	43.91	3036.94	13701.06	50.91	
70	Casing Joints		90.239312	68.37	42.90	3079.84	13658.16	51.63	36 8.25" COMPOSITE
71	Casing Joints		91.595902	69.40	46.30	3126.14	13611.86	52.40	
72	Casing Joints		92.832655	70.34	42.21	3168.35	13569.65	53.11	37 8.25" COMPOSITE
73	Casing Joints		94.19364	71.37	46.45	3214.80	13523.20	53.89	
74	Casing Joints		95.45061	72.32	42.90	3257.70	13480.30	54.61	38 8.25" COMPOSITE
75	Casing Joints		96.638725	73.22	40.55	3298.25	13439.75	55.29	
76	Casing Joints		97.8034	74.10	39.75	3338.00	13400.00	55.96	39 8.25" COMPOSITE
77	Casing Joints		98.99298	75.00	40.60	3378.60	13359.40	56.64	
78	Casing Joints		100.261963	75.97	43.31	3421.91	13316.09	57.36	40 8.25" COMPOSITE
79	Casing Joints		101.428689	76.85	39.82	3461.73	13276.27	58.03	
80	Casing Joints		102.698844	77.81	43.35	3505.08	13232.92	58.76	41 8.25" COMPOSITE
81	Casing Joints		103.904539	78.73	41.15	3546.23	13191.77	59.45	
82	Casing Joints		105.123419	79.65	41.60	3587.83	13150.17	60.14	42 8.25" COMPOSITE
83	Casing Joints		106.481474	80.68	46.35	3634.18	13103.82	60.92	
84	Casing Joints		107.698889	81.60	41.55	3675.73	13062.27	61.62	43 8.25" COMPOSITE
85	Casing Joints		108.875284	82.49	40.15	3715.88	13022.12	62.29	
86	Casing Joints		110.086839	83.41	41.35	3757.23	12980.77	62.98	44 8.25" COMPOSITE
87	Casing Joints		111.292534	84.32	41.15	3798.38	12939.62	63.67	
88	Casing Joints		112.504089	85.24	41.35	3839.73	12898.27	64.37	45 8.25" COMPOSITE
89	Casing Joints		113.742014	86.18	42.25	3881.98	12856.02	65.08	
90	Casing Joints		114.92925	87.08	40.52	3922.50	12815.50	65.75	46 8.25" COMPOSITE
91	Casing Joints		116.143735	88.00	41.45	3963.95	12774.05	66.45	
92	Casing Joints		117.33185	88.90	40.55	4004.50	12733.50	67.13	47 8.25" COMPOSITE
93	Casing Joints		118.539303	89.81	41.21	4045.71	12692.29	67.82	
94	Casing Joints		119.740603	90.72	41.00	4086.71	12651.29	68.51	48 8.25" COMPOSITE
95	Casing Joints		120.958018	91.65	41.55	4128.26	12609.74	69.20	
96	Casing Joints		122.156388	92.56	40.90	4169.16	12568.84	69.89	49 8.25" COMPOSITE
97	Casing Joints		123.370873	93.48	41.45	4210.61	12527.39	70.58	
98	Casing Joints		124.507713	94.34	38.80	4249.41	12488.59	71.23	50 8.25" COMPOSITE
99	Casing Joints		125.750326	95.28	42.41	4291.82	12446.18	71.95	
100	Casing Joints		126.89537	96.15	39.08	4330.90	12407.10	72.60	51 8.25" COMPOSITE
101	Casing Joints		128.115715	97.07	41.65	4372.55	12365.45	73.30	
102	Casing Joints		129.416049	98.06	44.38	4416.93	12321.07	74.04	52 8.25" COMPOSITE
103	Casing Joints		130.692064	99.02	43.55	4460.48	12277.52	74.77	
104	Casing Joints		131.896294	99.94	41.10	4501.58	12236.42	75.46	53 8.25" COMPOSITE
105	Casing Joints		133.143009	100.88	42.55	4544.13	12193.87	76.17	
106	Casing Joints		134.499892	101.91	46.31	4590.44	12147.56	76.95	54 8.25" COMPOSITE
107	Casing Joints		135.756276	102.86	42.88	4633.32	12104.68	77.67	
108	Casing Joints		136.994201	103.80	42.25	4675.57	12062.43	78.38	55 8.25" COMPOSITE
109	Casing Joints		138.224801	104.73	42.00	4717.57	12020.43	79.08	
110	Casing Joints		139.429031	105.64	41.10	4758.67	11979.33	79.77	56 8.25" COMPOSITE
111	Casing Joints		140.637656	106.56	41.25	4799.92	11938.08	80.46	
	Marker F		141.33734	107.09	23.88	4823.80	11914.20	80.86	57 8.25" COMPOSITE
112	Casing Joints		142.610425	108.05	43.45	4867.25	11870.75	81.59	
113	Casing Joints		143.88351	109.02	43.45	4910.70	11827.30	82.32	58 8.25" COMPOSITE
114	Casing Joints		145.14341	109.97	43.00	4953.70	11784.30	83.04	
115	Casing Joints		146.331525	110.87	40.55	4994.25	11743.75	83.72	59 8.25" COMPOSITE
116	Casing Joints		147.691338	111.90	46.41	5040.66	11697.34	84.50	
117	Casing Joints		148.892638	112.81	41.00	5081.66	11656.34	85.19	60 8.25" COMPOSITE
118	Casing Joints		150.120308	113.74	41.90	5123.56	11614.44	85.89	
119	Casing Joints		151.340653	114.67	41.65	5165.21	11572.79	86.59	61 8.25" COMPOSITE
120	Casing Joints		152.584438	115.61	42.45	5207.66	11530.34	87.30	
121	Casing Joints		153.797458	116.53	41.40	5249.06	11488.94	87.99	62 8.25" COMPOSITE
122	Casing Joints		155.052963	117.48	42.85	5291.91	11446.09	88.71	
123	Casing Joints		156.305538	118.43	42.75	5334.66	11403.34	89.43	63 8.25" COMPOSITE
124	Casing Joints		157.457321	119.30	39.31	5373.97	11364.03	90.09	
125	Casing Joints		158.576874	120.15	38.21	5412.18	11325.82	90.73	64 8.25" COMPOSITE
126	Casing Joints		159.831207	121.10	42.81	5454.99	11283.01	91.44	
127	Casing Joints		161.108687	122.07	43.60	5498.59	11239.41	92.17	65 8.25" COMPOSITE
128	Casing Joints		162.390562	123.04	43.75	5542.34	11195.66	92.91	
129	Casing Joints		163.647532	123.99	42.90	5585.24	11152.76	93.63	66 8.25" COMPOSITE
130	Casing Joints		164.944057	124.97	44.25	5629.49	11108.51	94.37	
131	Casing Joints		166.305921	126.01	46.48	5675.97	11062.03	95.15	67 8.25" COMPOSITE
132	Casing Joints		167.485246	126.90	40.25	5716.22	11021.78	95.82	
133	Casing Joints		168.683616	127.81	40.90	5757.12	10980.88	96.51	68 8.25" COMPOSITE
134	Casing Joints		169.858546	128.70	40.10	5797.22	10940.78	97.18	
135	Casing Joints		171.093541	129.63	42.15	5839.37	10898.63	97.89	69 8.25" COMPOSITE
136	Casing Joints		172.338791	130.58	42.50	5881.87	10856.13	98.60	
137	Casing Joints		173.661686	131.58	45.15	5927.02	10810.98	99.36	70 8.25" COMPOSITE
138	Casing Joints		174.917191	132.53	42.85	5969.87	10768.13	100.08	
139	Casing Joints		176.127281	133.45	41.30	6011.17	10726.83	100.77	71 8.25" COMPOSITE
140	Casing Joints		177.385716	134.40	42.95	6054.12	10683.88	101.49	
141	Casing Joints		178.579691	135.31	40.75	6094.87	10643.13	102.17	72 8.25" COMPOSITE
142	Casing Joints		179.675511	136.14	37.40	6132.27	10605.73	102.80	
143	Casing Joints		180.925156	137.08	42.65	6174.92	10563.08	103.51	73 8.25" COMPOSITE
144	Casing Joints		182.167769	138.02	42.41	6217.33	10520.67	104.22	
145	Casing Joints		183.423274	138.98	42.85	6260.18	10477.82	104.94	74 8.25" COMPOSITE
146	Casing Joints		184.677314	139.93	42.80	6302.98	10435.02	105.66	
147	Casing Joints		185.706037	140.71	35.11	6338.09	10399.91	106.25	75 8.25" COMPOSITE
148	Casing Joints		186.930777	141.63	41.80	6379.89	10358.11	106.95	
149	Casing Joints		188.186282	142.58	42.85	6422.74	10315.26	107.67	76 8.25" COMPOSITE
150	Casing Joints		189.260127	143.40	36.65	6459.39	10278.61	108.28	
151	Casing Joints		190.454102	144.30	40.75	6500.14	10237.86	108.96	77 8.25" COMPOSITE

152	Casing Joints		191.670052	145.22	41.50	6541.64	10196.36	109.66	
153	Casing Joints		192.879556	146.14	41.28	6582.92	10155.08	110.35	78 8.25" COMPOSITE
154	Casing Joints		194.139456	147.10	43.00	6625.92	10112.08	111.07	
155	Casing Joints		195.466746	148.10	45.30	6671.22	10066.78	111.83	79 8.25" COMPOSITE
156	Casing Joints		196.722251	149.05	42.85	6714.07	10023.93	112.55	
157	Casing Joints		197.948456	149.98	41.85	6755.92	9982.08	113.25	80 8.25" COMPOSITE
158	Casing Joints		199.177591	150.91	41.95	6797.87	9940.13	113.96	
159	Casing Joints		200.535646	151.94	46.35	6844.22	9893.78	114.73	81 8.25" COMPOSITE
160	Casing Joints		201.772106	152.88	42.20	6886.42	9851.58	115.44	
161	Casing Joints		203.059841	153.85	43.95	6930.37	9807.63	116.18	82 8.25" COMPOSITE
162	Casing Joints		204.327066	154.81	43.25	6973.62	9764.38	116.90	
163	Casing Joints		205.660509	155.82	45.51	7019.13	9718.87	117.66	83 8.25" COMPOSITE
164	Casing Joints		206.916014	156.78	42.85	7061.98	9676.02	118.38	
165	Casing Joints		208.171226	157.73	42.84	7104.82	9633.18	119.10	84 8.25" COMPOSITE
166	Casing Joints		209.423801	158.68	42.75	7147.57	9590.43	119.82	
167	Casing Joints		210.677841	159.63	42.80	7190.37	9547.63	120.53	85 8.25" COMPOSITE
168	Casing Joints		211.933346	160.58	42.85	7233.22	9504.78	121.25	
169	Casing Joints		213.284076	161.60	46.10	7279.32	9458.68	122.03	86 8.25" COMPOSITE
170	Casing Joints		214.488306	162.51	41.10	7320.42	9417.58	122.71	
171	Casing Joints		215.743518	163.46	42.84	7363.26	9374.74	123.43	87 8.25" COMPOSITE
172	Casing Joints		217.034183	164.44	44.05	7407.31	9330.69	124.17	
173	Casing Joints		218.347995	165.44	44.84	7452.15	9285.85	124.92	88 8.25" COMPOSITE
174	Casing Joints		219.6035	166.39	42.85	7495.00	9243.00	125.64	
175	Casing Joints		220.847285	167.33	42.45	7537.45	9200.55	126.35	89 8.25" COMPOSITE
176	Casing Joints		222.08228	168.27	42.15	7579.60	9158.40	127.06	
177	Casing Joints		223.34511	169.22	43.10	7622.70	9115.30	127.78	90 8.25" COMPOSITE
178	Casing Joints		224.59915	170.17	42.80	7665.50	9072.50	128.50	
179	Casing Joints		225.828285	171.11	41.95	7707.45	9030.55	129.20	91 8.25" COMPOSITE
180	Casing Joints		227.032515	172.02	41.10	7748.55	8989.45	129.89	
181	Casing Joints		228.286848	172.97	42.81	7791.36	8946.64	130.61	92 8.25" COMPOSITE
182	Casing Joints		229.542646	173.92	42.86	7834.22	8903.78	131.33	
183	Casing Joints		230.797858	174.87	42.84	7877.06	8860.94	132.05	93 8.25" COMPOSITE
184	Casing Joints		232.050433	175.82	42.75	7919.81	8818.19	132.76	
185	Casing Joints		233.305938	176.77	42.85	7962.66	8775.34	133.48	94 8.25" COMPOSITE
186	Casing Joints		234.520423	177.69	41.45	8004.11	8733.89	134.18	
187	Casing Joints		235.774463	178.64	42.80	8046.91	8691.09	134.89	95 8.25" COMPOSITE
188	Casing Joints		237.027038	179.59	42.75	8089.66	8648.34	135.61	
189	Casing Joints		238.242988	180.51	41.50	8131.16	8606.84	136.31	96 8.25" COMPOSITE
190	Casing Joints		239.499372	181.46	42.88	8174.04	8563.96	137.02	
191	Casing Joints		240.749017	182.41	42.65	8216.69	8521.31	137.74	97 8.25" COMPOSITE
192	Casing Joints		242.003057	183.36	42.80	8259.49	8478.51	138.46	
193	Casing Joints		243.24567	184.30	42.41	8301.90	8436.10	139.17	98 8.25" COMPOSITE
194	Casing Joints		244.486525	185.24	42.35	8344.25	8393.75	139.88	
195	Casing Joints		245.740565	186.19	42.80	8387.05	8350.95	140.60	99 8.25" COMPOSITE
196	Casing Joints		247.000465	187.15	43.00	8430.05	8307.95	141.32	
197	Casing Joints		248.173051	188.04	40.02	8470.07	8267.93	141.99	100 8.25" COMPOSITE
198	Casing Joints		249.460786	189.01	43.95	8514.02	8223.98	142.72	
199	Casing Joints		250.624582	189.89	39.72	8553.74	8184.26	143.39	101 8.25" COMPOSITE
200	Casing Joints		251.976777	190.92	46.15	8599.89	8138.11	144.16	
201	Casing Joints		253.232282	191.87	42.85	8642.74	8095.26	144.88	102 8.25" COMPOSITE
202	Casing Joints		254.492182	192.82	43.00	8685.74	8052.26	145.60	
203	Casing Joints		255.746222	193.77	42.80	8728.54	8009.46	146.32	103 8.25" COMPOSITE
204	Casing Joints		257.006708	194.73	43.02	8771.56	7966.44	147.04	
205	Casing Joints		258.260748	195.68	42.80	8814.36	7923.64	147.76	104 8.25" COMPOSITE
206	Casing Joints		259.520648	196.63	43.00	8857.36	7880.64	148.48	
207	Casing Joints		260.777618	197.59	42.90	8900.26	7837.74	149.20	105 8.25" COMPOSITE
208	Casing Joints		262.031658	198.54	42.80	8943.06	7794.94	149.92	
209	Casing Joints		263.295953	199.49	43.15	8986.21	7751.79	150.64	106 8.25" COMPOSITE
210	Casing Joints		264.542668	200.44	42.55	9028.76	7709.24	151.35	
211	Casing Joints		265.799638	201.39	42.90	9071.66	7666.34	152.07	107 8.25" COMPOSITE
212	Casing Joints		267.18963	202.44	47.44	9119.10	7618.90	152.87	
213	Casing Joints		268.571125	203.49	47.15	9166.25	7571.75	153.66	108 8.25" COMPOSITE
214	Casing Joints		269.95262	204.54	47.15	9213.40	7524.60	154.45	
215	Casing Joints		271.342905	205.59	47.45	9260.85	7477.15	155.24	109 8.25" COMPOSITE
216	Casing Joints		272.73319	206.64	47.45	9308.30	7429.70	156.04	
217	Casing Joints		273.955	207.57	41.70	9350.00	7388.00	156.74	110 8.25" COMPOSITE
218	Casing Joints		275.336495	208.62	47.15	9397.15	7340.85	157.53	
219	Casing Joints		276.58907	209.57	42.75	9439.90	7298.10	158.24	111 8.25" COMPOSITE
220	Casing Joints		277.985215	210.62	47.65	9487.55	7250.45	159.04	
221	Casing Joints		279.359385	211.66	46.90	9534.45	7203.55	159.83	112 8.25" COMPOSITE
222	Casing Joints		280.751135	212.72	47.50	9581.95	7156.05	160.63	
	Marker G		281.45287	213.25	23.95	9605.90	7132.10	161.03	EOB 7125' 113 8.25" COMPOSITE
223	Casing Joints		282.697534	214.19	42.48	9648.38	7089.62	161.74	114 8.25" COMPOSITE
224	Casing Joints		284.027754	215.20	45.40	9693.78	7044.22	162.50	115 8.25" COMPOSITE
225	Casing Joints		285.261284	216.14	42.10	9735.88	7002.12	163.21	116 8.25" COMPOSITE
226	Casing Joints		286.654499	217.19	47.55	9783.43	6954.57	164.00	117 8.25" COMPOSITE
227	Casing Joints		288.032185	218.24	47.02	9830.45	6907.55	164.79	118 8.25" COMPOSITE
228	Casing Joints		289.4254	219.29	47.55	9878.00	6860.00	165.59	119 8.25" COMPOSITE
229	Casing Joints		290.669185	220.23	42.45	9920.45	6817.55	166.30	120 8.25" COMPOSITE
230	Casing Joints		291.964245	221.22	44.20	9964.65	6773.35	167.04	121 8.25" COMPOSITE
231	Casing Joints		293.247585	222.19	43.80	10008.45	6729.55	167.78	122 8.25" COMPOSITE
232	Casing Joints		294.62908	223.23	47.15	10055.60	6682.40	168.57	123 8.25" COMPOSITE
233	Casing Joints		295.872865	224.18	42.45	10098.05	6639.95	169.28	124 8.25" COMPOSITE
234	Casing Joints		297.109325	225.11	42.20	10140.25	6597.75	169.98	125 8.25" COMPOSITE
235	Casing Joints		298.354575	226.06	42.50	10182.75	6555.25	170.70	126 8.25" COMPOSITE

236	Casing Joints		299.609787	227.01	42.84	10225.59	6512.41	171.42	127 8.25" COMPOSITE
237	Casing Joints		300.859432	227.95	42.65	10268.24	6469.76	172.13	128 8.25" COMPOSITE
238	Casing Joints		302.114937	228.91	42.85	10311.09	6426.91	172.85	129 8.25" COMPOSITE
239	Casing Joints		303.364582	229.85	42.65	10353.74	6384.26	173.56	130 8.25" COMPOSITE
240	Casing Joints		304.612762	230.80	42.60	10396.34	6341.66	174.28	131 8.25" COMPOSITE
241	Casing Joints		305.969645	231.83	46.31	10442.65	6295.35	175.05	132 8.25" COMPOSITE
242	Casing Joints		307.33063	232.86	46.45	10489.10	6248.90	175.83	133 8.25" COMPOSITE
243	Casing Joints		308.701284	233.90	46.78	10535.88	6202.12	176.62	134 8.25" COMPOSITE
244	Casing Joints		309.945069	234.84	42.45	10578.33	6159.67	177.33	135 8.25" COMPOSITE
245	Casing Joints		311.159554	235.76	41.45	10619.78	6118.22	178.02	136 8.25" COMPOSITE
246	Casing Joints		312.403339	236.70	42.45	10662.23	6075.77	178.73	137 8.25" COMPOSITE
247	Casing Joints		313.679354	237.67	43.55	10705.78	6032.22	179.46	138 8.25" COMPOSITE
248	Casing Joints		314.896769	238.59	41.55	10747.33	5990.67	180.16	139 8.25" COMPOSITE
	Marker H		315.570962	239.10	23.01	10770.34	5967.66	180.55	KOP 5933' 140 8.25" COMPOSITE
249	Casing Joints		316.891806	240.10	45.08	10815.42	5922.58	181.30	1 8.50" BOWSPRING
250	Casing Joints		318.283556	241.16	47.50	10862.92	5875.08	182.10	2 8.50" BOWSPRING
251	Casing Joints		319.527341	242.10	42.45	10905.37	5832.63	182.81	3 8.50" BOWSPRING
252	Casing Joints		320.771126	243.04	42.45	10947.82	5790.18	183.52	4 8.50" BOWSPRING
253	Casing Joints		322.016376	243.99	42.50	10990.32	5747.68	184.23	5 8.50" BOWSPRING
254	Casing Joints		323.264849	244.93	42.61	11032.93	5705.07	184.95	6 8.50" BOWSPRING
255	Casing Joints		324.514494	245.88	42.65	11075.58	5662.42	185.66	7 8.50" BOWSPRING
256	Casing Joints		325.764139	246.82	42.65	11118.23	5619.77	186.38	8 8.50" BOWSPRING
257	Casing Joints		326.996204	247.76	42.05	11160.28	5577.72	187.08	9 8.50" BOWSPRING
258	Casing Joints		328.297124	248.74	44.40	11204.68	5533.32	187.83	10 8.50" BOWSPRING
259	Casing Joints		329.539444	249.69	42.40	11247.08	5490.92	188.54	11 8.50" BOWSPRING
260	Casing Joints		330.796707	250.64	42.91	11289.99	5448.01	189.26	12 8.50" BOWSPRING
261	Casing Joints		332.024963	251.57	41.92	11331.91	5406.09	189.96	13 8.50" BOWSPRING
262	Casing Joints		333.268748	252.51	42.45	11374.36	5363.64	190.67	14 8.50" BOWSPRING
263	Casing Joints		334.512533	253.45	42.45	11416.81	5321.19	191.38	15 8.50" BOWSPRING
264	Casing Joints		335.902818	254.51	47.45	11464.26	5273.74	192.18	16 8.50" BOWSPRING
265	Casing Joints		337.147482	255.45	42.48	11506.74	5231.26	192.89	17 8.50" BOWSPRING
266	Casing Joints		338.386872	256.39	42.30	11549.04	5188.96	193.60	18 8.50" BOWSPRING
267	Casing Joints		339.576452	257.29	40.60	11589.64	5148.36	194.28	19 8.50" BOWSPRING
268	Casing Joints		340.826976	258.24	42.68	11632.32	5105.68	195.00	20 8.50" BOWSPRING
269	Casing Joints		342.073398	259.18	42.54	11674.86	5063.14	195.71	21 8.50" BOWSPRING
270	Casing Joints		343.317183	260.12	42.45	11717.31	5020.69	196.42	22 8.50" BOWSPRING
271	Casing Joints		344.432048	260.97	38.05	11755.36	4982.64	197.06	23 8.50" BOWSPRING
272	Casing Joints		345.675833	261.91	42.45	11797.81	4940.19	197.77	24 8.50" BOWSPRING
273	Casing Joints		346.902038	262.84	41.85	11839.66	4898.34	198.47	25 8.50" BOWSPRING
274	Casing Joints		348.120918	263.76	41.60	11881.26	4856.74	199.17	26 8.50" BOWSPRING
275	Casing Joints		349.370563	264.71	42.65	11923.91	4814.09	199.88	27 8.50" BOWSPRING
276	Casing Joints		350.620208	265.66	42.65	11966.56	4771.44	200.60	28 8.50" BOWSPRING
277	Casing Joints		351.846413	266.59	41.85	12008.41	4729.59	201.30	29 8.50" BOWSPRING
278	Casing Joints		353.075548	267.52	41.95	12050.36	4687.64	202.00	30 8.50" BOWSPRING
279	Casing Joints		354.427743	268.54	46.15	12096.51	4641.49	202.78	31 8.50" BOWSPRING
280	Casing Joints		355.678853	269.49	42.70	12139.21	4598.79	203.49	32 8.50" BOWSPRING
281	Casing Joints		356.933186	270.44	42.81	12182.02	4555.98	204.21	33 8.50" BOWSPRING
282	Casing Joints		358.276591	271.46	45.85	12227.87	4510.13	204.98	34 8.50" BOWSPRING
283	Casing Joints		359.513051	272.40	42.20	12270.07	4467.93	205.69	35 8.50" BOWSPRING
284	Casing Joints		360.753613	273.34	42.34	12312.41	4425.59	206.40	36 8.50" BOWSPRING
285	Casing Joints		362.006188	274.28	42.75	12355.16	4382.84	207.11	37 8.50" BOWSPRING
286	Casing Joints		363.201921	275.19	40.81	12395.97	4342.03	207.80	38 8.50" BOWSPRING
287	Casing Joints		364.449515	276.14	42.58	12438.55	4299.45	208.51	39 8.50" BOWSPRING
288	Casing Joints		365.691835	277.08	42.40	12480.95	4257.05	209.22	40 8.50" BOWSPRING
289	Casing Joints		366.92976	278.02	42.25	12523.20	4214.80	209.93	41 8.50" BOWSPRING
290	Casing Joints		368.217495	278.99	43.95	12567.15	4170.85	210.67	42 8.50" BOWSPRING
291	Casing Joints		369.471828	279.94	42.81	12609.96	4128.04	211.39	43 8.50" BOWSPRING
292	Casing Joints		370.828418	280.97	46.30	12656.26	4081.74	212.16	44 8.50" BOWSPRING
293	Casing Joints		371.991628	281.85	39.70	12695.96	4042.04	212.83	45 8.50" BOWSPRING
294	Casing Joints		373.148392	282.73	39.48	12735.44	4002.56	213.49	46 8.50" BOWSPRING
295	Casing Joints		374.404776	283.68	42.88	12778.32	3959.68	214.21	47 8.50" BOWSPRING
296	Casing Joints		375.644166	284.62	42.30	12820.62	3917.38	214.92	48 8.50" BOWSPRING
297	Casing Joints		376.904066	285.57	43.00	12863.62	3874.38	215.64	49 8.50" BOWSPRING
298	Casing Joints		378.083391	286.47	40.25	12903.87	3834.13	216.31	50 8.50" BOWSPRING
299	Casing Joints		379.248066	287.35	39.75	12943.62	3794.38	216.98	51 8.50" BOWSPRING
300	Casing Joints		380.431786	288.25	40.40	12984.02	3753.98	217.66	52 8.50" BOWSPRING
301	Casing Joints		381.687291	289.20	42.85	13026.87	3711.13	218.37	53 8.50" BOWSPRING
302	Casing Joints		382.951586	290.15	43.15	13070.02	3667.98	219.10	54 8.50" BOWSPRING
303	Casing Joints		384.135306	291.05	40.40	13110.42	3627.58	219.77	55 8.50" BOWSPRING
304	Casing Joints		385.351256	291.97	41.50	13151.92	3586.08	220.47	56 8.50" BOWSPRING
305	Casing Joints		386.499816	292.84	39.20	13191.12	3546.88	221.13	57 8.50" BOWSPRING
306	Casing Joints		387.755321	293.79	42.85	13233.97	3504.03	221.85	58 8.50" BOWSPRING
307	Casing Joints		389.045986	294.77	44.05	13278.02	3459.98	222.58	59 8.50" BOWSPRING
308	Casing Joints		390.368881	295.77	45.15	13323.17	3414.83	223.34	60 8.50" BOWSPRING
309	Casing Joints		391.725764	296.80	46.31	13369.48	3368.52	224.12	61 8.50" BOWSPRING
310	Casing Joints		393.061844	297.81	45.60	13415.08	3322.92	224.88	62 8.50" BOWSPRING
311	Casing Joints		394.343719	298.79	43.75	13458.83	3279.17	225.62	63 8.50" BOWSPRING
312	Casing Joints		395.616804	299.75	43.45	13502.28	3235.72	226.34	64 8.50" BOWSPRING
313	Casing Joints		396.939699	300.75	45.15	13547.43	3190.57	227.10	65 8.50" BOWSPRING
314	Casing Joints		398.133381	301.66	40.74	13588.17	3149.83	227.78	66 8.50" BOWSPRING
315	Casing Joints		399.315636	302.55	40.35	13628.52	3109.48	228.46	67 8.50" BOWSPRING
316	Casing Joints		400.590479	303.52	43.51	13672.03	3065.97	229.19	68 8.50" BOWSPRING
317	Casing Joints		401.777129	304.42	40.50	13712.53	3025.47	229.87	69 8.50" BOWSPRING
318	Casing Joints		403.094164	305.42	44.95	13757.48	2980.52	230.62	70 8.50" BOWSPRING
319	Casing Joints		404.236864	306.28	39.00	13796.48	2941.52	231.28	71 8.50" BOWSPRING

320	Casing Joints		405.441094	307.19	41.10	13837.58	2900.42	231.96	72 8.50" BOWSPRING
321	Casing Joints		406.720039	308.16	43.65	13881.23	2856.77	232.70	73 8.50" BOWSPRING
322	Casing Joints		407.899364	309.06	40.25	13921.48	2816.52	233.37	74 8.50" BOWSPRING
323	Casing Joints		409.182704	310.03	43.80	13965.28	2772.72	234.10	75 8.50" BOWSPRING
324	Casing Joints		410.461649	311.00	43.65	14008.93	2729.07	234.84	76 8.50" BOWSPRING
325	Casing Joints		411.717154	311.95	42.85	14051.78	2686.22	235.56	77 8.50" BOWSPRING
326	Casing Joints		413.000787	312.92	43.81	14095.59	2642.41	236.29	78 8.50" BOWSPRING
327	Casing Joints		414.278267	313.89	43.60	14139.19	2598.81	237.02	79 8.50" BOWSPRING
328	Casing Joints		415.551352	314.85	43.45	14182.64	2555.36	237.75	80 8.50" BOWSPRING
329	Casing Joints		416.820042	315.82	43.30	14225.94	2512.06	238.47	81 8.50" BOWSPRING
330	Casing Joints		418.093127	316.78	43.45	14269.39	2468.61	239.20	82 8.50" BOWSPRING
331	Casing Joints		419.36797	317.75	43.51	14312.90	2425.10	239.93	83 8.50" BOWSPRING
332	Casing Joints		420.64545	318.71	43.60	14356.50	2381.50	240.66	84 8.50" BOWSPRING
333	Casing Joints		421.851145	319.63	41.15	14397.65	2340.35	241.35	85 8.50" BOWSPRING
334	Casing Joints		423.125695	320.59	43.50	14441.15	2296.85	242.08	86 8.50" BOWSPRING
335	Casing Joints		424.400538	321.56	43.51	14484.66	2253.34	242.81	87 8.50" BOWSPRING
336	Casing Joints		425.675674	322.53	43.52	14528.18	2209.82	243.54	88 8.50" BOWSPRING
337	Casing Joints		426.950517	323.49	43.51	14571.69	2166.31	244.27	89 8.50" BOWSPRING
338	Casing Joints		428.2195	324.45	43.31	14615.00	2123.00	245.00	90 8.50" BOWSPRING
339	Casing Joints		429.498445	325.42	43.65	14658.65	2079.35	245.73	91 8.50" BOWSPRING
340	Casing Joints		430.772995	326.39	43.50	14702.15	2035.85	246.46	92 8.50" BOWSPRING
341	Casing Joints		432.018538	327.33	42.51	14744.66	1993.34	247.17	93 8.50" BOWSPRING
342	Casing Joints		433.291623	328.30	43.45	14788.11	1949.89	247.90	94 8.50" BOWSPRING
343	Casing Joints		434.476808	329.19	40.45	14828.56	1909.44	248.58	95 8.50" BOWSPRING
344	Casing Joints		435.755753	330.16	43.65	14872.21	1865.79	249.31	96 8.50" BOWSPRING
345	Casing Joints		437.030596	331.13	43.51	14915.72	1822.28	250.04	97 8.50" BOWSPRING
346	Casing Joints		438.308369	332.10	43.61	14959.33	1778.67	250.77	98 8.50" BOWSPRING
347	Casing Joints		439.584384	333.06	43.55	15002.88	1735.12	251.50	99 8.50" BOWSPRING
348	Casing Joints		440.845749	334.02	43.05	15045.93	1692.07	252.22	100 8.50" BOWSPRING
349	Casing Joints		442.118541	334.98	43.44	15089.37	1648.63	252.95	101 8.50" BOWSPRING
350	Casing Joints		443.393677	335.95	43.52	15132.89	1605.11	253.68	102 8.50" BOWSPRING
351	Casing Joints		444.668227	336.92	43.50	15176.39	1561.61	254.41	103 8.50" BOWSPRING
352	Casing Joints		445.941312	337.88	43.45	15219.84	1518.16	255.14	104 8.50" BOWSPRING
353	Casing Joints		447.217034	338.85	43.54	15263.38	1474.62	255.87	105 8.50" BOWSPRING
354	Casing Joints		448.38083	339.73	39.72	15303.10	1434.90	256.53	106 8.50" BOWSPRING
355	Casing Joints		449.633405	340.68	42.75	15345.85	1392.15	257.25	107 8.50" BOWSPRING
356	Casing Joints		450.90649	341.64	43.45	15389.30	1348.70	257.98	108 8.50" BOWSPRING
357	Casing Joints		452.207703	342.63	44.41	15433.71	1304.29	258.72	109 8.50" BOWSPRING
358	Casing Joints		453.479323	343.59	43.40	15477.11	1260.89	259.45	110 8.50" BOWSPRING
359	Casing Joints		454.755338	344.56	43.55	15520.66	1217.34	260.18	111 8.50" BOWSPRING
360	Casing Joints		456.028423	345.52	43.45	15564.11	1173.89	260.91	112 8.50" BOWSPRING
361	Casing Joints		457.219468	346.43	40.65	15604.76	1133.24	261.59	113 8.50" BOWSPRING
362	Casing Joints		458.494018	347.39	43.50	15648.26	1089.74	262.32	114 8.50" BOWSPRING
363	Casing Joints		459.73751	348.33	42.44	15690.70	1047.30	263.03	115 8.50" BOWSPRING
364	Casing Joints		460.993015	349.28	42.85	15733.55	1004.45	263.75	116 8.50" BOWSPRING
365	Casing Joints		462.24266	350.23	42.65	15776.20	961.80	264.46	117 8.50" BOWSPRING
366	Casing Joints		463.63148	351.28	47.40	15823.60	914.40	265.26	118 8.50" BOWSPRING
367	Casing Joints		464.995395	352.32	46.55	15870.15	867.85	266.04	119 8.50" BOWSPRING
368	Casing Joints		466.38861	353.37	47.55	15917.70	820.30	266.83	120 8.50" BOWSPRING
369	Casing Joints		467.644115	354.32	42.85	15960.55	777.45	267.55	121 8.50" BOWSPRING
370	Casing Joints		468.927455	355.30	43.80	16004.35	733.65	268.29	122 8.50" BOWSPRING
371	Casing Joints		470.32067	356.35	47.55	16051.90	686.10	269.08	123 8.50" BOWSPRING
372	Casing Joints		471.708025	357.40	47.35	16099.25	638.75	269.88	124 8.50" BOWSPRING
373	Casing Joints		473.096845	358.46	47.40	16146.65	591.35	270.67	125 8.50" BOWSPRING
374	Casing Joints		474.471894	359.50	46.93	16193.58	544.42	271.46	126 8.50" BOWSPRING
375	Casing Joints		475.728864	360.45	42.90	16236.48	501.52	272.18	127 8.50" BOWSPRING
376	Casing Joints		477.017478	361.43	43.98	16280.46	457.54	272.92	
377	Casing Joints		478.398973	362.47	47.15	16327.61	410.39	273.71	
378	Casing Joints		479.645688	363.42	42.55	16370.16	367.84	274.42	
379	Casing Joints		481.033043	364.47	47.35	16417.51	320.49	275.21	
380	Casing Joints		482.374983	365.49	45.80	16463.31	274.69	275.98	
381	Casing Joints		483.592398	366.41	41.55	16504.86	233.14	276.68	
382	Casing Joints		484.985613	367.46	47.55	16552.41	185.59	277.47	
383	Casing Joints		486.375898	368.52	47.45	16599.86	138.14	278.27	
384	Casing Joints		487.765011	369.57	47.41	16647.27	90.73	279.06	
385	Casing Joints		489.136251	370.61	46.80	16694.07	43.93	279.85	
386	Casing Joints		490.522434	371.66	47.31	16741.38	-3.38	280.64	
387	Casing Joints		491.909789	372.71	47.35	16788.73	-50.73	281.44	1 OUT JOINT
388	Casing Joints		493.298023	373.76	47.38	16836.11	-98.11	282.23	2 OUT JOINT
389	Casing Joints		494.571108	374.73	43.45	16879.56	-141.56	282.96	3 OUT JOINT
390	Casing Joints		495.953482	375.77	47.18	16926.74	-188.74	283.75	4 OUT JOINT
391	Casing Joints		497.344646	376.83	47.48	16974.22	-236.22	284.54	5 OUT JOINT
392	Casing Joints		498.743721	377.89	47.75	17021.97	-283.97	285.35	6 OUT JOINT
393	Casing Joints		500.019443	378.85	43.54	17065.51	-327.51	286.08	7 OUT JOINT
394	Casing Joints		501.382186	379.89	46.51	17112.02	-374.02	286.85	8 OUT JOINT
			501.382186	379.89		17112.02	-374.02	286.85	
1	MARKER A		501.734372	380.15	12.02	17124.04	-386.04	287.06	1 OUT MARKER
2	MARKER B		502.086265	380.42	12.01	17136.05	-398.05	287.26	2 OUT MARKER
3	MARKER C		502.420285	380.67	11.40	17147.45	-409.45	287.45	3 OUT MARKER
4	MARKER D		502.749031	380.92	11.22	17158.67	-420.67	287.64	4 OUT MARKER