

Downhole Schematic for Federal 19-14BB (PD30)



Project : South Piceance		API # : 05045184620000		Surface Location : NWNW Sec 30 T7S - R95W 6th P																																																																																																																																																																																																																		
Area : Parachute		County : GARFIELD		BHL : SESW-19-7S-95 W 6th PM																																																																																																																																																																																																																		
As Of : 12/30/2011		GL : 6124.0 ft		KB to GL : 22.0 ft		KB : 6146.0 ft																																																																																																																																																																																																																
Set @ 41		<div>Casing Details</div> <table><tr><th>Section</th><th>Hole</th><th>Casing</th><th>Mass</th><th>Set At</th><th>Length</th><th>Thread</th><th>Grade</th><th>Description</th></tr><tr><td>Conductor</td><td>26.000</td><td>16</td><td>42</td><td>41</td><td>41</td><td></td><td></td><td>Conductor</td></tr><tr><td>Surface</td><td>12.250</td><td>8.625</td><td>24</td><td>1,151</td><td>2</td><td>ST&amp;C</td><td>K55</td><td>Guide Shoe</td></tr><tr><td></td><td></td><td>8.625</td><td>24</td><td>1,150</td><td>20</td><td>ST&amp;C</td><td>J55</td><td>Shoe Joint</td></tr><tr><td></td><td></td><td>8.625</td><td>24</td><td>1,130</td><td>2</td><td>ST&amp;C</td><td>K55</td><td>Float Collar</td></tr><tr><td></td><td></td><td>8.625</td><td>24</td><td>1,128</td><td>1,096</td><td>ST&amp;C</td><td>J55</td><td>Casing Joints</td></tr><tr><td></td><td></td><td>8.625</td><td>24</td><td>32</td><td>6</td><td>ST&amp;C</td><td>J55</td><td>Wellhead</td></tr><tr><td></td><td></td><td>8.625</td><td>24</td><td>26</td><td>27</td><td>ST&amp;C</td><td>J55</td><td>Landing Joint</td></tr><tr><td>Production</td><td>7.875</td><td>4.5</td><td>11.6</td><td>7,025</td><td>2</td><td>LT&amp;C</td><td>L80</td><td>Float Shoe</td></tr><tr><td></td><td></td><td>4.5</td><td>11.6</td><td>7,024</td><td>45</td><td>LT&amp;C</td><td>S80</td><td>Shoe Joint</td></tr><tr><td></td><td></td><td>4.5</td><td>11.6</td><td>6,978</td><td>2</td><td>LT&amp;C</td><td>L80</td><td>Float Collar</td></tr><tr><td></td><td></td><td>4.5</td><td>11.6</td><td>6,977</td><td>6,948</td><td>LT&amp;C</td><td>S80</td><td>S80 Joints</td></tr><tr><td></td><td></td><td>4.5</td><td>11.6</td><td>28</td><td>6</td><td>LT&amp;C</td><td>P110</td><td>Mandrel Hanger</td></tr><tr><td></td><td></td><td>4.5</td><td>11.6</td><td>22</td><td>26</td><td>LT&amp;C</td><td>I80</td><td>Landing Joint</td></tr></table>								Section	Hole	Casing	Mass	Set At	Length	Thread	Grade	Description	Conductor	26.000	16	42	41	41			Conductor	Surface	12.250	8.625	24	1,151	2	ST&C	K55	Guide Shoe			8.625	24	1,150	20	ST&C	J55	Shoe Joint			8.625	24	1,130	2	ST&C	K55	Float Collar			8.625	24	1,128	1,096	ST&C	J55	Casing Joints			8.625	24	32	6	ST&C	J55	Wellhead			8.625	24	26	27	ST&C	J55	Landing Joint	Production	7.875	4.5	11.6	7,025	2	LT&C	L80	Float Shoe			4.5	11.6	7,024	45	LT&C	S80	Shoe Joint			4.5	11.6	6,978	2	LT&C	L80	Float Collar			4.5	11.6	6,977	6,948	LT&C	S80	S80 Joints			4.5	11.6	28	6	LT&C	P110	Mandrel Hanger			4.5	11.6	22	26	LT&C	I80	Landing Joint																																																																															
Section	Hole	Casing	Mass	Set At	Length	Thread	Grade	Description																																																																																																																																																																																																														
Conductor	26.000	16	42	41	41			Conductor																																																																																																																																																																																																														
Surface	12.250	8.625	24	1,151	2	ST&C	K55	Guide Shoe																																																																																																																																																																																																														
		8.625	24	1,150	20	ST&C	J55	Shoe Joint																																																																																																																																																																																																														
		8.625	24	1,130	2	ST&C	K55	Float Collar																																																																																																																																																																																																														
		8.625	24	1,128	1,096	ST&C	J55	Casing Joints																																																																																																																																																																																																														
		8.625	24	32	6	ST&C	J55	Wellhead																																																																																																																																																																																																														
		8.625	24	26	27	ST&C	J55	Landing Joint																																																																																																																																																																																																														
Production	7.875	4.5	11.6	7,025	2	LT&C	L80	Float Shoe																																																																																																																																																																																																														
		4.5	11.6	7,024	45	LT&C	S80	Shoe Joint																																																																																																																																																																																																														
		4.5	11.6	6,978	2	LT&C	L80	Float Collar																																																																																																																																																																																																														
		4.5	11.6	6,977	6,948	LT&C	S80	S80 Joints																																																																																																																																																																																																														
		4.5	11.6	28	6	LT&C	P110	Mandrel Hanger																																																																																																																																																																																																														
		4.5	11.6	22	26	LT&C	I80	Landing Joint																																																																																																																																																																																																														
		<div>Cement Details</div> <table><tr><th>Section</th><th>Sequence</th><th>Top</th><th>Density</th><th>Blend / Additives</th></tr><tr><td>Surface</td><td>Lead</td><td>0</td><td>12.5</td><td>12.5 PPG Lead / 1.88 lb/sx D079, 0.19 lb/sx D046, 0.25 lb/sx D029, 94 lb/sx D907</td></tr><tr><td></td><td>Tail</td><td>500</td><td>15.8</td><td>15.8 PPG G / 1.17 lb/sx S001, 0.19 lb/sx D046, 0.25 lb/sx D029, 94 lb/sx D907</td></tr><tr><td>Conductor</td><td>Fill</td><td>0</td><td>0.0</td><td>4 Yards Concrete /</td></tr><tr><td>Production</td><td>Tail</td><td>1,051</td><td>9.5</td><td>9.5 LiteCRETE / 9.5 LC + 0.4% D013 + 0.2% D046 + 0.25 ppsD</td></tr></table>								Section	Sequence	Top	Density	Blend / Additives	Surface	Lead	0	12.5	12.5 PPG Lead / 1.88 lb/sx D079, 0.19 lb/sx D046, 0.25 lb/sx D029, 94 lb/sx D907		Tail	500	15.8	15.8 PPG G / 1.17 lb/sx S001, 0.19 lb/sx D046, 0.25 lb/sx D029, 94 lb/sx D907	Conductor	Fill	0	0.0	4 Yards Concrete /	Production	Tail	1,051	9.5	9.5 LiteCRETE / 9.5 LC + 0.4% D013 + 0.2% D046 + 0.25 ppsD																																																																																																																																																																																				
Section	Sequence	Top	Density	Blend / Additives																																																																																																																																																																																																																		
Surface	Lead	0	12.5	12.5 PPG Lead / 1.88 lb/sx D079, 0.19 lb/sx D046, 0.25 lb/sx D029, 94 lb/sx D907																																																																																																																																																																																																																		
	Tail	500	15.8	15.8 PPG G / 1.17 lb/sx S001, 0.19 lb/sx D046, 0.25 lb/sx D029, 94 lb/sx D907																																																																																																																																																																																																																		
Conductor	Fill	0	0.0	4 Yards Concrete /																																																																																																																																																																																																																		
Production	Tail	1,051	9.5	9.5 LiteCRETE / 9.5 LC + 0.4% D013 + 0.2% D046 + 0.25 ppsD																																																																																																																																																																																																																		
		<div>Tubing and Downhole Equipment</div> <table><tr><th>O.D.</th><th>Length</th><th>Depth</th><th>Description</th></tr><tr><td>0.000</td><td>20.00</td><td>20.00</td><td>KB</td></tr><tr><td>4.063</td><td>0.82</td><td>20.82</td><td>4 1/16" 5 K Wood Group HGR</td></tr><tr><td>2.628</td><td>0.67</td><td>21.49</td><td>Saver Sub</td></tr><tr><td>2.375</td><td>6,074.34</td><td>6,095.83</td><td>185 jts 2 3/8" J-55 4.7# Eue Tbg</td></tr><tr><td>3.063</td><td>0.97</td><td>6,096.80</td><td>F- Nipple</td></tr><tr><td>2.375</td><td>32.82</td><td>6,129.62</td><td>1 jt 2 3/8" J-55 4.7# Eue Tbg</td></tr><tr><td>3.063</td><td>0.92</td><td>6,130.54</td><td>POBS</td></tr><tr><td>3.750</td><td>1.22</td><td>6,977.00</td><td>POBS and 3 3/4 hurricane bit</td></tr></table>								O.D.	Length	Depth	Description	0.000	20.00	20.00	KB	4.063	0.82	20.82	4 1/16" 5 K Wood Group HGR	2.628	0.67	21.49	Saver Sub	2.375	6,074.34	6,095.83	185 jts 2 3/8" J-55 4.7# Eue Tbg	3.063	0.97	6,096.80	F- Nipple	2.375	32.82	6,129.62	1 jt 2 3/8" J-55 4.7# Eue Tbg	3.063	0.92	6,130.54	POBS	3.750	1.22	6,977.00	POBS and 3 3/4 hurricane bit																																																																																																																																																																									
O.D.	Length	Depth	Description																																																																																																																																																																																																																			
0.000	20.00	20.00	KB																																																																																																																																																																																																																			
4.063	0.82	20.82	4 1/16" 5 K Wood Group HGR																																																																																																																																																																																																																			
2.628	0.67	21.49	Saver Sub																																																																																																																																																																																																																			
2.375	6,074.34	6,095.83	185 jts 2 3/8" J-55 4.7# Eue Tbg																																																																																																																																																																																																																			
3.063	0.97	6,096.80	F- Nipple																																																																																																																																																																																																																			
2.375	32.82	6,129.62	1 jt 2 3/8" J-55 4.7# Eue Tbg																																																																																																																																																																																																																			
3.063	0.92	6,130.54	POBS																																																																																																																																																																																																																			
3.750	1.22	6,977.00	POBS and 3 3/4 hurricane bit																																																																																																																																																																																																																			
		<div>Perforations</div> <table><tr><th>Stage</th><th>Date</th><th>From</th><th>To</th><th>Shots</th></tr><tr><td rowspan="6">Stage 1</td><td rowspan="6">09/08/2009</td><td>6,828</td><td>6,829</td><td>3</td></tr><tr><td>6,820</td><td>6,821</td><td>3</td></tr><tr><td>6,810</td><td>6,811</td><td>3</td></tr><tr><td>6,800</td><td>6,801</td><td>3</td></tr><tr><td>6,790</td><td>6,791</td><td>3</td></tr><tr><td>6,714</td><td>6,715</td><td>3</td></tr><tr><td rowspan="6">Stage 2</td><td rowspan="6">09/24/2009</td><td>6,702</td><td>6,703</td><td>3</td></tr><tr><td>6,658</td><td>6,659</td><td>3</td></tr><tr><td>6,630</td><td>6,631</td><td>3</td></tr><tr><td>6,596</td><td>6,597</td><td>3</td></tr><tr><td>6,580</td><td>6,581</td><td>3</td></tr><tr><td>6,566</td><td>6,567</td><td>3</td></tr><tr><td rowspan="6">Stage 3</td><td rowspan="6">09/25/2009</td><td>6,526</td><td>6,527</td><td>3</td></tr><tr><td>6,464</td><td>6,465</td><td>3</td></tr><tr><td>6,436</td><td>6,437</td><td>3</td></tr><tr><td>6,398</td><td>6,399</td><td>3</td></tr><tr><td>6,368</td><td>6,369</td><td>3</td></tr><tr><td>6,344</td><td>6,345</td><td>3</td></tr><tr><td rowspan="6">Stage 4</td><td rowspan="6">09/25/2009</td><td>6,268</td><td>6,269</td><td>3</td></tr><tr><td>6,250</td><td>6,251</td><td>3</td></tr><tr><td>6,222</td><td>6,223</td><td>3</td></tr><tr><td>6,200</td><td>6,201</td><td>3</td></tr><tr><td>6,160</td><td>6,161</td><td>3</td></tr><tr><td>6,122</td><td>6,123</td><td>3</td></tr><tr><td rowspan="6">Stage 5</td><td rowspan="6">09/25/2009</td><td>6,092</td><td>6,093</td><td>3</td></tr><tr><td>6,054</td><td>6,055</td><td>3</td></tr><tr><td>6,040</td><td>6,041</td><td>3</td></tr><tr><td>5,992</td><td>5,993</td><td>3</td></tr><tr><td>5,982</td><td>5,983</td><td>3</td></tr><tr><td>5,960</td><td>5,961</td><td>3</td></tr><tr><td rowspan="6">Stage 6</td><td rowspan="6">09/25/2009</td><td>5,916</td><td>5,917</td><td>3</td></tr><tr><td>5,900</td><td>5,901</td><td>3</td></tr><tr><td>5,868</td><td>5,869</td><td>3</td></tr><tr><td>5,836</td><td>5,837</td><td>3</td></tr><tr><td>5,812</td><td>5,813</td><td>3</td></tr><tr><td>5,772</td><td>5,773</td><td>3</td></tr><tr><td rowspan="6">Stage 7</td><td rowspan="6">09/28/2009</td><td>5,756</td><td>5,757</td><td>3</td></tr><tr><td>5,738</td><td>5,739</td><td>3</td></tr><tr><td>5,726</td><td>5,727</td><td>3</td></tr><tr><td>5,076</td><td>5,076</td><td>3</td></tr><tr><td>5,010</td><td>5,011</td><td>3</td></tr><tr><td>4,998</td><td>4,999</td><td>3</td></tr><tr><td rowspan="6">Stage 8</td><td rowspan="6">11/30/2011</td><td>4,988</td><td>4,989</td><td>3</td></tr><tr><td>5,172</td><td>5,173</td><td>3</td></tr><tr><td>5,152</td><td>5,153</td><td>3</td></tr><tr><td>5,133</td><td>5,134</td><td>3</td></tr><tr><td>5,124</td><td>5,125</td><td>3</td></tr><tr><td>5,102</td><td>5,103</td><td>3</td></tr><tr><td rowspan="6">Stage 9</td><td rowspan="6">12/03/2011</td><td>5,076</td><td>5,076</td><td>3</td></tr><tr><td>4,958</td><td>4,959</td><td>3</td></tr><tr><td>4,950</td><td>4,951</td><td>3</td></tr><tr><td>4,928</td><td>4,929</td><td>3</td></tr><tr><td>4,908</td><td>4,909</td><td>3</td></tr><tr><td>4,888</td><td>4,889</td><td>3</td></tr><tr><td rowspan="6">Stage 10</td><td rowspan="6">12/03/2011</td><td>4,862</td><td>4,863</td><td>3</td></tr><tr><td>4,828</td><td>4,829</td><td>3</td></tr><tr><td>4,817</td><td>4,818</td><td>3</td></tr><tr><td>4,807</td><td>4,808</td><td>3</td></tr><tr><td>4,807</td><td>4,808</td><td>3</td></tr><tr><td>4,807</td><td>4,808</td><td>3</td></tr></table>								Stage	Date	From	To	Shots	Stage 1	09/08/2009	6,828	6,829	3	6,820	6,821	3	6,810	6,811	3	6,800	6,801	3	6,790	6,791	3	6,714	6,715	3	Stage 2	09/24/2009	6,702	6,703	3	6,658	6,659	3	6,630	6,631	3	6,596	6,597	3	6,580	6,581	3	6,566	6,567	3	Stage 3	09/25/2009	6,526	6,527	3	6,464	6,465	3	6,436	6,437	3	6,398	6,399	3	6,368	6,369	3	6,344	6,345	3	Stage 4	09/25/2009	6,268	6,269	3	6,250	6,251	3	6,222	6,223	3	6,200	6,201	3	6,160	6,161	3	6,122	6,123	3	Stage 5	09/25/2009	6,092	6,093	3	6,054	6,055	3	6,040	6,041	3	5,992	5,993	3	5,982	5,983	3	5,960	5,961	3	Stage 6	09/25/2009	5,916	5,917	3	5,900	5,901	3	5,868	5,869	3	5,836	5,837	3	5,812	5,813	3	5,772	5,773	3	Stage 7	09/28/2009	5,756	5,757	3	5,738	5,739	3	5,726	5,727	3	5,076	5,076	3	5,010	5,011	3	4,998	4,999	3	Stage 8	11/30/2011	4,988	4,989	3	5,172	5,173	3	5,152	5,153	3	5,133	5,134	3	5,124	5,125	3	5,102	5,103	3	Stage 9	12/03/2011	5,076	5,076	3	4,958	4,959	3	4,950	4,951	3	4,928	4,929	3	4,908	4,909	3	4,888	4,889	3	Stage 10	12/03/2011	4,862	4,863	3	4,828	4,829	3	4,817	4,818	3	4,807	4,808	3	4,807	4,808	3	4,807	4,808	3
Stage	Date	From	To	Shots																																																																																																																																																																																																																		
Stage 1	09/08/2009	6,828	6,829	3																																																																																																																																																																																																																		
		6,820	6,821	3																																																																																																																																																																																																																		
		6,810	6,811	3																																																																																																																																																																																																																		
		6,800	6,801	3																																																																																																																																																																																																																		
		6,790	6,791	3																																																																																																																																																																																																																		
		6,714	6,715	3																																																																																																																																																																																																																		
Stage 2	09/24/2009	6,702	6,703	3																																																																																																																																																																																																																		
		6,658	6,659	3																																																																																																																																																																																																																		
		6,630	6,631	3																																																																																																																																																																																																																		
		6,596	6,597	3																																																																																																																																																																																																																		
		6,580	6,581	3																																																																																																																																																																																																																		
		6,566	6,567	3																																																																																																																																																																																																																		
Stage 3	09/25/2009	6,526	6,527	3																																																																																																																																																																																																																		
		6,464	6,465	3																																																																																																																																																																																																																		
		6,436	6,437	3																																																																																																																																																																																																																		
		6,398	6,399	3																																																																																																																																																																																																																		
		6,368	6,369	3																																																																																																																																																																																																																		
		6,344	6,345	3																																																																																																																																																																																																																		
Stage 4	09/25/2009	6,268	6,269	3																																																																																																																																																																																																																		
		6,250	6,251	3																																																																																																																																																																																																																		
		6,222	6,223	3																																																																																																																																																																																																																		
		6,200	6,201	3																																																																																																																																																																																																																		
		6,160	6,161	3																																																																																																																																																																																																																		
		6,122	6,123	3																																																																																																																																																																																																																		
Stage 5	09/25/2009	6,092	6,093	3																																																																																																																																																																																																																		
		6,054	6,055	3																																																																																																																																																																																																																		
		6,040	6,041	3																																																																																																																																																																																																																		
		5,992	5,993	3																																																																																																																																																																																																																		
		5,982	5,983	3																																																																																																																																																																																																																		
		5,960	5,961	3																																																																																																																																																																																																																		
Stage 6	09/25/2009	5,916	5,917	3																																																																																																																																																																																																																		
		5,900	5,901	3																																																																																																																																																																																																																		
		5,868	5,869	3																																																																																																																																																																																																																		
		5,836	5,837	3																																																																																																																																																																																																																		
		5,812	5,813	3																																																																																																																																																																																																																		
		5,772	5,773	3																																																																																																																																																																																																																		
Stage 7	09/28/2009	5,756	5,757	3																																																																																																																																																																																																																		
		5,738	5,739	3																																																																																																																																																																																																																		
		5,726	5,727	3																																																																																																																																																																																																																		
		5,076	5,076	3																																																																																																																																																																																																																		
		5,010	5,011	3																																																																																																																																																																																																																		
		4,998	4,999	3																																																																																																																																																																																																																		
Stage 8	11/30/2011	4,988	4,989	3																																																																																																																																																																																																																		
		5,172	5,173	3																																																																																																																																																																																																																		
		5,152	5,153	3																																																																																																																																																																																																																		
		5,133	5,134	3																																																																																																																																																																																																																		
		5,124	5,125	3																																																																																																																																																																																																																		
		5,102	5,103	3																																																																																																																																																																																																																		
Stage 9	12/03/2011	5,076	5,076	3																																																																																																																																																																																																																		
		4,958	4,959	3																																																																																																																																																																																																																		
		4,950	4,951	3																																																																																																																																																																																																																		
		4,928	4,929	3																																																																																																																																																																																																																		
		4,908	4,909	3																																																																																																																																																																																																																		
		4,888	4,889	3																																																																																																																																																																																																																		
Stage 10	12/03/2011	4,862	4,863	3																																																																																																																																																																																																																		
		4,828	4,829	3																																																																																																																																																																																																																		
		4,817	4,818	3																																																																																																																																																																																																																		
		4,807	4,808	3																																																																																																																																																																																																																		
		4,807	4,808	3																																																																																																																																																																																																																		
		4,807	4,808	3																																																																																																																																																																																																																		
		<div>Frac Summary</div> <table><tr><td>Stage 1 : 6,630 - 6,829, 27 - 0.350" shots, 8392.7 bbls of Slickwater, 108000 lbs of 20/40 White Sand</td></tr><tr><td>Report Date: 09/24/2009</td></tr><tr><td>Stage 2 : 6,344 - 6,597, 27 - 0.350" shots, 5842.5 bbls of Slickwater, 79900 lbs of 20/40 White Sand</td></tr><tr><td>Report Date: 09/24/2009</td></tr><tr><td>Stage 3 : 6,040 - 6,269, 27 - 0.350" shots, 6345.1 bbls of Slickwater</td></tr><tr><td>Report Date: 09/25/2009</td></tr><tr><td>Stage 4 : 5,812 - 6,009, 27 - 0.350" shots, 8355.9 bbls of Slickwater, 117300 lbs of 20/40 White Sand</td></tr><tr><td>Report Date: 09/25/2009</td></tr><tr><td>Stage 5 : 5,580 - 5,773, 27 - 0.350" shots, 6285.5 bbls of Slickwater, 79700 lbs of 20/40 White Sand</td></tr><tr><td>Report Date: 09/28/2009</td></tr><tr><td>Stage 6 : 5,350 - 5,545, 27 - 0.350" shots, 7182.5 bbls of Slickwater, 98100 lbs of 20/40 White Sand</td></tr><tr><td>Report Date: 09/29/2009</td></tr><tr><td>Stage 7 : 5,194 - 5,315, 27 - 0.350" shots, 7668.7 bbls of Slickwater, 108200 lbs of 20/40 White Sand</td></tr><tr><td>Report Date: 09/29/2009</td></tr><tr><td>Stage 8 : 4,988 - 5,173, 27 - 0.340" shots, 9980 bbls of Slickwater</td></tr><tr><td>Report Date: 12/02/2011</td></tr><tr><td>Stage 9 : 4,807 - 4,959, 27 - 0.340" shots, 8691 bbls of Slickwater</td></tr><tr><td>Report Date: 12/05/2011</td></tr></table>								Stage 1 : 6,630 - 6,829, 27 - 0.350" shots, 8392.7 bbls of Slickwater, 108000 lbs of 20/40 White Sand	Report Date: 09/24/2009	Stage 2 : 6,344 - 6,597, 27 - 0.350" shots, 5842.5 bbls of Slickwater, 79900 lbs of 20/40 White Sand	Report Date: 09/24/2009	Stage 3 : 6,040 - 6,269, 27 - 0.350" shots, 6345.1 bbls of Slickwater	Report Date: 09/25/2009	Stage 4 : 5,812 - 6,009, 27 - 0.350" shots, 8355.9 bbls of Slickwater, 117300 lbs of 20/40 White Sand	Report Date: 09/25/2009	Stage 5 : 5,580 - 5,773, 27 - 0.350" shots, 6285.5 bbls of Slickwater, 79700 lbs of 20/40 White Sand	Report Date: 09/28/2009	Stage 6 : 5,350 - 5,545, 27 - 0.350" shots, 7182.5 bbls of Slickwater, 98100 lbs of 20/40 White Sand	Report Date: 09/29/2009	Stage 7 : 5,194 - 5,315, 27 - 0.350" shots, 7668.7 bbls of Slickwater, 108200 lbs of 20/40 White Sand	Report Date: 09/29/2009	Stage 8 : 4,988 - 5,173, 27 - 0.340" shots, 9980 bbls of Slickwater	Report Date: 12/02/2011	Stage 9 : 4,807 - 4,959, 27 - 0.340" shots, 8691 bbls of Slickwater	Report Date: 12/05/2011																																																																																																																																																																																											
Stage 1 : 6,630 - 6,829, 27 - 0.350" shots, 8392.7 bbls of Slickwater, 108000 lbs of 20/40 White Sand																																																																																																																																																																																																																						
Report Date: 09/24/2009																																																																																																																																																																																																																						
Stage 2 : 6,344 - 6,597, 27 - 0.350" shots, 5842.5 bbls of Slickwater, 79900 lbs of 20/40 White Sand																																																																																																																																																																																																																						
Report Date: 09/24/2009																																																																																																																																																																																																																						
Stage 3 : 6,040 - 6,269, 27 - 0.350" shots, 6345.1 bbls of Slickwater																																																																																																																																																																																																																						
Report Date: 09/25/2009																																																																																																																																																																																																																						
Stage 4 : 5,812 - 6,009, 27 - 0.350" shots, 8355.9 bbls of Slickwater, 117300 lbs of 20/40 White Sand																																																																																																																																																																																																																						
Report Date: 09/25/2009																																																																																																																																																																																																																						
Stage 5 : 5,580 - 5,773, 27 - 0.350" shots, 6285.5 bbls of Slickwater, 79700 lbs of 20/40 White Sand																																																																																																																																																																																																																						
Report Date: 09/28/2009																																																																																																																																																																																																																						
Stage 6 : 5,350 - 5,545, 27 - 0.350" shots, 7182.5 bbls of Slickwater, 98100 lbs of 20/40 White Sand																																																																																																																																																																																																																						
Report Date: 09/29/2009																																																																																																																																																																																																																						
Stage 7 : 5,194 - 5,315, 27 - 0.350" shots, 7668.7 bbls of Slickwater, 108200 lbs of 20/40 White Sand																																																																																																																																																																																																																						
Report Date: 09/29/2009																																																																																																																																																																																																																						
Stage 8 : 4,988 - 5,173, 27 - 0.340" shots, 9980 bbls of Slickwater																																																																																																																																																																																																																						
Report Date: 12/02/2011																																																																																																																																																																																																																						
Stage 9 : 4,807 - 4,959, 27 - 0.340" shots, 8691 bbls of Slickwater																																																																																																																																																																																																																						
Report Date: 12/05/2011																																																																																																																																																																																																																						
		<div>Comments</div> <table><tr><td>9/24/09 BH- 0 to 0 psi stg.1</td></tr><tr><td>9/24/09 BH- 0 to 0 psi stg.2</td></tr><tr><td>9/25/09 BH- 0 to 0 psi stg.3</td></tr><tr><td>9/25/09 BH- 0 to 0 psi stg.4</td></tr><tr><td>9/28/09 BH- 0 to 0 psi stg.5</td></tr><tr><td>9/29/09 BH- 0 to 0 psi stg.6</td></tr><tr><td>9/29/09 BH- 0 to 0 psi stg.7</td></tr><tr><td>10/26/09 SIBHP 0, SIBHP- 25 psi on 10-5-10 SIBP 35 psi 11/21/11</td></tr><tr><td>SIBHP 30 psi 12/13/11</td></tr><tr><td>SIBHP 40 psi 12/30/11</td></tr></table>								9/24/09 BH- 0 to 0 psi stg.1	9/24/09 BH- 0 to 0 psi stg.2	9/25/09 BH- 0 to 0 psi stg.3	9/25/09 BH- 0 to 0 psi stg.4	9/28/09 BH- 0 to 0 psi stg.5	9/29/09 BH- 0 to 0 psi stg.6	9/29/09 BH- 0 to 0 psi stg.7	10/26/09 SIBHP 0, SIBHP- 25 psi on 10-5-10 SIBP 35 psi 11/21/11	SIBHP 30 psi 12/13/11	SIBHP 40 psi 12/30/11																																																																																																																																																																																																			
9/24/09 BH- 0 to 0 psi stg.1																																																																																																																																																																																																																						
9/24/09 BH- 0 to 0 psi stg.2																																																																																																																																																																																																																						
9/25/09 BH- 0 to 0 psi stg.3																																																																																																																																																																																																																						
9/25/09 BH- 0 to 0 psi stg.4																																																																																																																																																																																																																						
9/28/09 BH- 0 to 0 psi stg.5																																																																																																																																																																																																																						
9/29/09 BH- 0 to 0 psi stg.6																																																																																																																																																																																																																						
9/29/09 BH- 0 to 0 psi stg.7																																																																																																																																																																																																																						
10/26/09 SIBHP 0, SIBHP- 25 psi on 10-5-10 SIBP 35 psi 11/21/11																																																																																																																																																																																																																						
SIBHP 30 psi 12/13/11																																																																																																																																																																																																																						
SIBHP 40 psi 12/30/11																																																																																																																																																																																																																						
Set @ 7025		PBTB @ 6977 TD @ 7040																																																																																																																																																																																																																				