

Downhole Schematic for SG 8501E-21 N22 496



Project :North Piceance		API # :05045206640000		Surface Location : Lot5 Sec 22 T4S - R96W 6th PM																																																																																																																																																																																																														
Area : Story Gulch		County :		BHL : NENE-21-4S-96 W 6th PM																																																																																																																																																																																																														
As Of : 1/19/12		GL : 7585.0 ft		KB to GL :		22.0 ft		KB : 7607.0 ft																																																																																																																																																																																																										
Set @ 118		<table><tr><th colspan="2">Casing Details</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><th>Section</th><th>Conductor</th><th>30.000</th><th>20</th><th>52.78</th><th>118</th><th>120</th><th></th><th>A53B</th><th>Line pipe</th></tr><tr><td>-500 ft</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>-1000 ft</td><td>Surface</td><td>14.750</td><td>9.625</td><td>0</td><td>2,131</td><td>2</td><td>LT&C</td><td>J-55</td><td>Float Shoe</td></tr><tr><td></td><td></td><td></td><td>9.625</td><td>36</td><td>2,130</td><td>44</td><td>LT&C</td><td>J-55</td><td>Casing</td></tr><tr><td>-1500 ft</td><td></td><td></td><td>9.625</td><td>0</td><td>2,086</td><td>2</td><td>LT&C</td><td>J-55</td><td>float collar</td></tr><tr><td></td><td></td><td></td><td>9.625</td><td>36</td><td>2,084</td><td>126</td><td>LT&C</td><td>J-55</td><td>Casing</td></tr><tr><td>-2000 ft</td><td></td><td></td><td>9.625</td><td>0</td><td>1,958</td><td>2</td><td>LT&C</td><td></td><td>Air Collar</td></tr><tr><td></td><td></td><td></td><td>9.625</td><td>36</td><td>1,957</td><td>1,929</td><td>LT&C</td><td>J-55</td><td>Casing</td></tr><tr><td>-2500 ft</td><td></td><td></td><td>9.625</td><td>0</td><td>28</td><td>5</td><td>LT&C</td><td></td><td>casing head</td></tr><tr><td></td><td></td><td></td><td>9.625</td><td>36</td><td>23</td><td>28</td><td>Butt</td><td>J-55</td><td>Landing Joint</td></tr><tr><td>-3000 ft</td><td>Production</td><td>8.750</td><td>4.5</td><td>11.6</td><td>12,323</td><td>2</td><td>Butt</td><td>P-110</td><td>Guide Shoe</td></tr><tr><td></td><td></td><td></td><td>4.5</td><td>11.6</td><td>12,322</td><td>22</td><td>Butt</td><td>P-110</td><td>Casing Jt.</td></tr><tr><td>-3500 ft</td><td></td><td></td><td>4.5</td><td>11.6</td><td>12,300</td><td>2</td><td>Butt</td><td>P-110</td><td>Float Collar</td></tr><tr><td></td><td></td><td></td><td>4.5</td><td>11.6</td><td>12,298</td><td>1,493</td><td>Butt</td><td>P-110</td><td>Caing Jts.</td></tr><tr><td>-4000 ft</td><td></td><td></td><td>4.5</td><td>11.6</td><td>10,805</td><td>22</td><td>Butt</td><td>P-110</td><td>Marker Jt</td></tr><tr><td></td><td></td><td></td><td>4.5</td><td>11.6</td><td>10,783</td><td>2,878</td><td>Butt</td><td>P-110</td><td>Casing Jts</td></tr><tr><td>-4500 ft</td><td></td><td></td><td>4.5</td><td>11.6</td><td>7,906</td><td>22</td><td>Butt</td><td>P-110</td><td>Marker Jt</td></tr><tr><td></td><td></td><td></td><td>4.5</td><td>11.6</td><td>7,883</td><td>7,888</td><td>Butt</td><td>P-110</td><td>Casing Jts</td></tr><tr><td>-5000 ft</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>									Casing Details		Hole	Casing	Mass	Set At	Length	Thread	Grade	Description	Section	Conductor	30.000	20	52.78	118	120		A53B	Line pipe	-500 ft										-1000 ft	Surface	14.750	9.625	0	2,131	2	LT&C	J-55	Float Shoe				9.625	36	2,130	44	LT&C	J-55	Casing	-1500 ft			9.625	0	2,086	2	LT&C	J-55	float collar				9.625	36	2,084	126	LT&C	J-55	Casing	-2000 ft			9.625	0	1,958	2	LT&C		Air Collar				9.625	36	1,957	1,929	LT&C	J-55	Casing	-2500 ft			9.625	0	28	5	LT&C		casing head				9.625	36	23	28	Butt	J-55	Landing Joint	-3000 ft	Production	8.750	4.5	11.6	12,323	2	Butt	P-110	Guide Shoe				4.5	11.6	12,322	22	Butt	P-110	Casing Jt.	-3500 ft			4.5	11.6	12,300	2	Butt	P-110	Float Collar				4.5	11.6	12,298	1,493	Butt	P-110	Caing Jts.	-4000 ft			4.5	11.6	10,805	22	Butt	P-110	Marker Jt				4.5	11.6	10,783	2,878	Butt	P-110	Casing Jts	-4500 ft			4.5	11.6	7,906	22	Butt	P-110	Marker Jt				4.5	11.6	7,883	7,888	Butt	P-110	Casing Jts	-5000 ft									
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		<table><tr><th colspan="2">Cement Details</th><th>Sequence</th><th>Top</th><th>Density</th><th colspan="4">Blend / Additives</th></tr><tr><th>Section</th><th>Conductor</th><th></th><th></th><th></th><th colspan="4">Control set C / 1/4 lb/sk Polly Flake</th></tr><tr><td>-6000 ft</td><td></td><td>Fill</td><td>0</td><td>12.0</td><td colspan="4">Control Set C / .25 lb/sk PF</td></tr><tr><td></td><td></td><td>Tail</td><td>55</td><td>12.0</td><td colspan="4"></td></tr><tr><td>-6500 ft</td><td>Surface</td><td>Lead</td><td>0</td><td>11.0</td><td colspan="4">LiteFIL 11# / D124 11#/sk, D053 6%, D079 2%, D046 .2%, D029 .25#/sk</td></tr><tr><td></td><td></td><td>Tail</td><td>1,629</td><td>12.5</td><td colspan="4">LiteFIL 12.5# / D124 11#/sk, D053 6%, D046 .2%, D029 .25#/sk, D013 .15%, D065 .2%</td></tr><tr><td>-7000 ft</td><td></td><td></td><td></td><td></td><td colspan="4">MUDPUSH II / D031@106.7#/bbl, D182@5#/bbl</td></tr><tr><td></td><td>Production</td><td>Scavenger</td><td>0</td><td>10.3</td><td colspan="4">10.5ppg TXI / D049@75#/sk, D020@12%, D079@1%, D013@1.5%, D029@.25#/sk, D046@.5%, D208@.1%</td></tr><tr><td></td><td></td><td>Fill</td><td>900</td><td>10.5</td><td colspan="4">12.0ppg TXI LS / D046@.5%, D013@1%, D079@1%, D049@75#/sk, D029@.25#/sk, D208@.1%</td></tr><tr><td></td><td></td><td>Lead</td><td>5,904</td><td>12.0</td><td colspan="4">13.0ppg Rockies CORRECT GMS Enc / D901@80#/sk, D035@11#/sk, D020@3%, D046@.2%, D065@.2%, D112@.75%, D178@35%, D201@.4%, D044@5%, D029@.25#/sk, D182@.5%</td></tr><tr><td></td><td></td><td>Tail</td><td>8,993</td><td>13.0</td><td colspan="4"></td></tr></table>									Cement Details		Sequence	Top	Density	Blend / Additives				Section	Conductor				Control set C / 1/4 lb/sk Polly Flake				-6000 ft		Fill	0	12.0	Control Set C / .25 lb/sk PF						Tail	55	12.0					-6500 ft	Surface	Lead	0	11.0	LiteFIL 11# / D124 11#/sk, D053 6%, D079 2%, D046 .2%, D029 .25#/sk						Tail	1,629	12.5	LiteFIL 12.5# / D124 11#/sk, D053 6%, D046 .2%, D029 .25#/sk, D013 .15%, D065 .2%				-7000 ft					MUDPUSH II / D031@106.7#/bbl, D182@5#/bbl					Production	Scavenger	0	10.3	10.5ppg TXI / D049@75#/sk, D020@12%, D079@1%, D013@1.5%, D029@.25#/sk, D046@.5%, D208@.1%						Fill	900	10.5	12.0ppg TXI LS / D046@.5%, D013@1%, D079@1%, D049@75#/sk, D029@.25#/sk, D208@.1%						Lead	5,904	12.0	13.0ppg Rockies CORRECT GMS Enc / D901@80#/sk, D035@11#/sk, D020@3%, D046@.2%, D065@.2%, D112@.75%, D178@35%, D201@.4%, D044@5%, D029@.25#/sk, D182@.5%						Tail	8,993	13.0																																																																																																									
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		Lead	5,904	12.0	13.0ppg Rockies CORRECT GMS Enc / D901@80#/sk, D035@11#/sk, D020@3%, D046@.2%, D065@.2%, D112@.75%, D178@35%, D201@.4%, D044@5%, D029@.25#/sk, D182@.5%																																																																																																																																																																																																													
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		Date	From	To	Shots																																																																																																																																																																																																													
		12/26/2011	12,126	12,127	3			11,382	11,383 3																																																																																																																																																																																																									
			12,106	12,107	3			11,368	11,369 3																																																																																																																																																																																																									
			11,996	11,997	3			11,358	11,359 3																																																																																																																																																																																																									
			11,975	11,976	3			11,334	11,335 3																																																																																																																																																																																																									
			11,959	11,960	3			11,296	11,297 3																																																																																																																																																																																																									
			11,936	11,937	3			11,282	11,283 3																																																																																																																																																																																																									
Stage 13			11,926	11,927	3																																																																																																																																																																																																													
			11,897	11,898	3																																																																																																																																																																																																													
			11,876	11,877	3																																																																																																																																																																																																													
			11,866	11,867	3																																																																																																																																																																																																													
		Stage 4																																																																																																																																																																																																																
		Date	From	To	Shots																																																																																																																																																																																																													
		12/29/2011	11,211	11,212	3																																																																																																																																																																																																													
			11,199	11,200	3																																																																																																																																																																																																													
			11,172	11,173	3																																																																																																																																																																																																													
			11,145	11,146	3																																																																																																																																																																																																													
			11,063	11,064	3																																																																																																																																																																																																													
			11,026	11,027	3																																																																																																																																																																																																													
			11,009	11,010	3																																																																																																																																																																																																													
			10,988	10,989	3																																																																																																																																																																																																													
			10,978	10,979	3																																																																																																																																																																																																													
			10,964	10,965	3																																																																																																																																																																																																													
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		Date	From	To	Shots																																																																																																																																																																																																													
		12/30/2011	10,916	10,917	3																																																																																																																																																																																																													
			10,894	10,895	3																																																																																																																																																																																																													
			10,875	10,876	3																																																																																																																																																																																																													
			10,846	10,847	3																																																																																																																																																																																																													
			10,828	10,829	3																																																																																																																																																																																																													
			10,771	10,772	3																																																																																																																																																																																																													
			10,750	10,751	3																																																																																																																																																																																																													
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			10,697	10,698	3																																																																																																																																																																																																													
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		01/02/2012	10,630	10,631	3																																																																																																																																																																																																													
			10,612	10,613	3																																																																																																																																																																																																													
			10,585	10,586	3																																																																																																																																																																																																													
			10,562	10,563	3																																																																																																																																																																																																													
			10,492	10,493	3																																																																																																																																																																																																													
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			10,434	10,435	3																																																																																																																																																																																																													
			10,406	10,407	3																																																																																																																																																																																																													
			10,387	10,388	3																																																																																																																																																																																																													
			10,365	10,366	3																																																																																																																																																																																																													
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		01/02/2012	10,340	10,341	3																																																																																																																																																																																																													
			10,323	10,324	3																																																																																																																																																																																																													
			10,307	10,308	3																																																																																																																																																																																																													
			10,261	10,262	3																																																																																																																																																																																																													
			10,244	10,245	3																																																																																																																																																																																																													
			10,228	10,229	3																																																																																																																																																																																																													
			10,196	10,197	3																																																																																																																																																																																																													
			10,133	10,134	3																																																																																																																																																																																																													
			10,102	10,103	3																																																																																																																																																																																																													
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		01/03/2012	10,046	10,047	3																																																																																																																																																																																																													
			10,038	10,039	3																																																																																																																																																																																																													
			10,010	10,011	3																																																																																																																																																																																																													
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			9,956	9,957	3																																																																																																																																																																																																													
			9,938	9,939	3																																																																																																																																																																																																													
			9,869	9,870	3																																																																																																																																																																																																													
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		Date	From	To	Shots																																																																																																																																																																																																													
		01/04/2012	9,688	9,689	3																																																																																																																																																																																																													
			9,675	9,676	3																																																																																																																																																																																																													
			9,650	9,651	3																																																																																																																																																																																																													
			9,633	9,634	3																																																																																																																																																																																																													
			9,607	9,608	3																																																																																																																																																																																																													
			9,528	9,529	3																																																																																																																																																																																																													
			9,507	9,508	3																																																																																																																																																																																																													
			9,468	9,469	3																																																																																																																																																																																																													
			9,449	9,450	3																																																																																																																																																																																																													
			9,432	9,433	3																																																																																																																																																																																																													
Set @ 12323	PBSD @ 12298 TD @ 12343	Frac Summary																																																																																																																																																																																																																
		Stage 1 : 11,866 - 12,127, 30 - 0.420" shots, 15236 bbls of Slickwater Report Date: 12/27/2011																																																																																																																																																																																																																
		Stage 2 : 11,627 - 11,846, 30 - 0.420" shots, 14284 bbls of Slickwater Report Date: 12/28/2011																																																																																																																																																																																																																
		Stage 3 : 11,282 - 11,493, 30 - 0.420" shots, 14285 bbls of Slickwater Report Date: 12/29/2011																																																																																																																																																																																																																
		Stage 4 : 10,964 - 11,212, 30 - 0.420" shots, 13715 bbls of Slickwater Report Date: 12/30/2011																																																																																																																																																																																																																
		Stage 5 : 10,674 - 10,917, 30 - 0.420" shots, 20569 bbls of Slickwater Report Date: 01/02/2012																																																																																																																																																																																																																
		Stage 6 : 10,365 - 10,631, 30 - 0.420" shots, 37493 bbls of Slickwater Report Date: 01/02/2012																																																																																																																																																																																																																
		Stage 7 : 10,082 - 10,341, 30 - 0.420" shots, 19048 bbls of Slickwater Report Date: 01/03/2012																																																																																																																																																																																																																
		Stage 8 : 9,799 - 10,047, 30 - 0.420" shots, 18668 bbls of Slickwater Report Date: 01/04/2012																																																																																																																																																																																																																
		Stage 9 : 9,432 - 9,689, 30 - 0.420" shots, 21303 bbls of Slickwater Report Date: 01/04/2012																																																																																																																																																																																																																
		Stage 10 : 9,118 - 9,394, 30 - 0.420" shots, 14256 bbls of Slickwater Report Date: 01/06/2012																																																																																																																																																																																																																
		Stage 11 : 8,869 - 9,073, 30 - 0.420" shots, 21712 bbls of Slickwater Report Date: 01/18/2012																																																																																																																																																																																																																

| Report by Decision Dynamics Technology Ltd. Well ID: February 16, 2012 11:07 | | | | | | | | | | |