

HALLIBURTON

WAVESONIC

FIELD COPY

COMPANY		KINDER MORGAN CO2 CO LP	
WELL		CD 4	
FIELD/BLOCK		MCELMO	
COUNTY		MONTEZUMA	
STATE		CO	
Permanent Datum		GL	
Log measured from		KB	
Drilling measured from		KB	
Date		02-Dec-14	
Run No.		ONE	
Depth - Driller		8725.00 ft	
Depth - Logger		8710.0 ft	
Bottom - Logged Interval		8707.0 ft	
Top - Logged Interval		8300.0 ft	
Casing - Driller		7.000 in @ 8315.0 ft	
Casing - Logger		8315.0 ft	
Bit Size		6.000 in @	
Type Fluid in Hole		Salt Water	
Density		8.9 ppg	
Viscosity		32.00 s/qt	
PH		9.10 pH	
Fluid Loss		380.0 cpm	
Source of Sample		MUD TANK	
Rm @ Meas. Temperature		0.11 ohmm @ 66.80 degF	
Rmf @ Meas. Temperature		0.10 ohmm @ 61.70 degF	
Rmc @ Meas. Temperature		0.200 ohmm @ 61.50 degF	
Source Rmf		MEASURED	
Rmc		MEASURED	
Rm @ BHT		0.04 ohmm @ 180.0 degF	
Time Since Circulation		13.5 hr	
Time on Bottom		03-Dec-14 20:30	
Max. Rec. Temperature		180.0 degF @ 8580.0 ft	
Equipment		11871076	
Location		GJ CO	
Recorded By		B. RIDDEL	
Witnessed By		J. DAVIS	

COMPANY	KINDER MORGAN CO2 CO LP
WELL	CD 4
FIELD/BLOCK	MCELMO
COUNTY	MONTEZUMA
STATE	CO
API No.	05083067180000
Location	SURFACE HOLE LOCATION: 1580' FSL & 2356' FEL BOTTOM HOLE LOCATION: 2286' FNL & 2144' FVL LATITUDE: 37.548680 LONGITUDE: -108.873080
Sect. 18	Twp. 38N
Rge. 18W	
Other Services:	RWCH CSNG XRMI DSNT SDLT DLT MSFL

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Service Ticket No.: 901883664				API Serial No.: 05083067180000				PGM Version: WL INSITE R4.2.0 (Build 2)							
CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE						RESISTIVITY SCALE CHANGES									
Date		Sample No.				Type Log		Depth		Scale Up Hole		Scale Down Hole			
Depth-Driller															
Type Fluid in Hole															
Density		Viscosity													
Ph		Fluid Loss													
Source of Sample						RESISTIVITY EQUIPMENT DATA									
Rm @ Meas. Temp		@		@		Run No.		Tool Type & No.		Pad Type		Tool Pos.		Other	
Rmf @ Meas. Temp.		@		@		ONE		DLT		N/A		CENT		N/A	
Rmc @ Meas. Temp.		@		@				10731630							
Source Rmf		Rmc				ONE		MSFL		SLIM PEAK		CENT		N/A	
Rm @ BHT		@		@				11555340							
Rmf @ BHT		@		@											
Rmc @ BHT		@		@											
EQUIPMENT DATA															
GAMMA				ACOUSTIC				DENSITY				NEUTRON			
Run No.		ONE		Run No.		ONE		Run No.		ONE		Run No.		ONE	
Serial No.		11958949		Serial No.		11838493		Serial No.		10865876		Serial No.		10993888	
Model No.		GTET		Model No.		WSTT-I		Model No.		SDLT-I		Model No.		DSNT-I	
Diameter		3.625"		No. of Cent.		0		Diameter		4.5"		Diameter		3.625"	
Detector Model No.		GTET		Spacing		0.5'		Log Type		GAMMA-GAMMA		Log Type		NEU-THERM	
Type		SCINT						Source Type		Cs137		Source Type		Am241Be	
Length		8"		LSA [Y/N]		Y		Serial No.		5153GW		Serial No.		DSN-388	
Distance to Source		17'		FWDA [Y/N]		Y		Strength		1.5 Ci		Strength		15 Ci	
LOGGING DATA															

GENERAL			GAMMA		ACOUSTIC			DENSITY			NEUTRON			
Run	Depth		Speed	Scale		Scale		Matrix	Scale		Matrix	Scale		Matrix
No.	From	To	ft/min	L	R	L	R		L	R		L	R	
ONE	8710	8315	REC	0 API	150 API	30 %	-10 %	47.5 us/ft	30 %	-10 %	2.71 g/cc	30 %	-10 %	LIME
ONE	8315	8000	REC	0 API	150 API									
DIRECTIONAL INFORMATION														
Maximum Deviation @								KOP @						
Remarks: TRIP ONE: CONNECTOR_SUB/FLEX/DTDD/HDDS/BRIDLE/CR/SP/BRIDLE/BS/GTET/CSNG/FLEX/DLLT/MSFL/BN RAN IN COMBINATION														
TRIP TWO: CONNECTOR_SUB/FLEX/DTDD/HDDS/GTET/DSNT/SDLT/BN RAN IN COMBINATION														
TRIP THREE: CONNECTOR_SUB/FLEX/DTDD/GTET/WSTT/XRMI/BN														
CO2 GAS IN WELL AFFECTED DIPOLE RESPONSE, CUSTOMER NOTIFIED														
BOREHOLE RUGOSITY, BITSIZE, TENSION PULLS AND WASHOUTS MAY EFFECT LOG QUALITY AND REPEATABILITY														
CHLORIDES REPORTED TO BE 54,000 ppm														
ANNULAR HOLE VOLUME CALCULATED USING 4.5-INCH CASING														
NO JEWELRY RAN PER CUSTOMER REQUEST DUE TO BOREHOLE SIZE.														
RUN ONE BRIDGED OUT AT 8580'. LOGGED OUT FROM THERE														
YOU CREW TODAY: B. CALWELL, T. RAFF,								RIG: NABORS M40						
THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES, GRAND JUNCTION, CO (970) 523-3600														
HALLIBURTON DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF THE LOG DATA, CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS OR RECOMMENDATIONS WHICH MAY BE GIVEN BY HALLIBURTON PERSONNEL OR WHICH APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA, INTERPRETATIONS, CONVERSIONS, OR RECOMMENDATIONS AGREES THAT HALLIBURTON IS NOT RESPONSIBLE EXCEPT WHERE DUE TO GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, FOR ANY LOSS, DAMAGES, OR EXPENSES RESULTING FROM THE USE THEREOF.														
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PARAMETERS REPORT

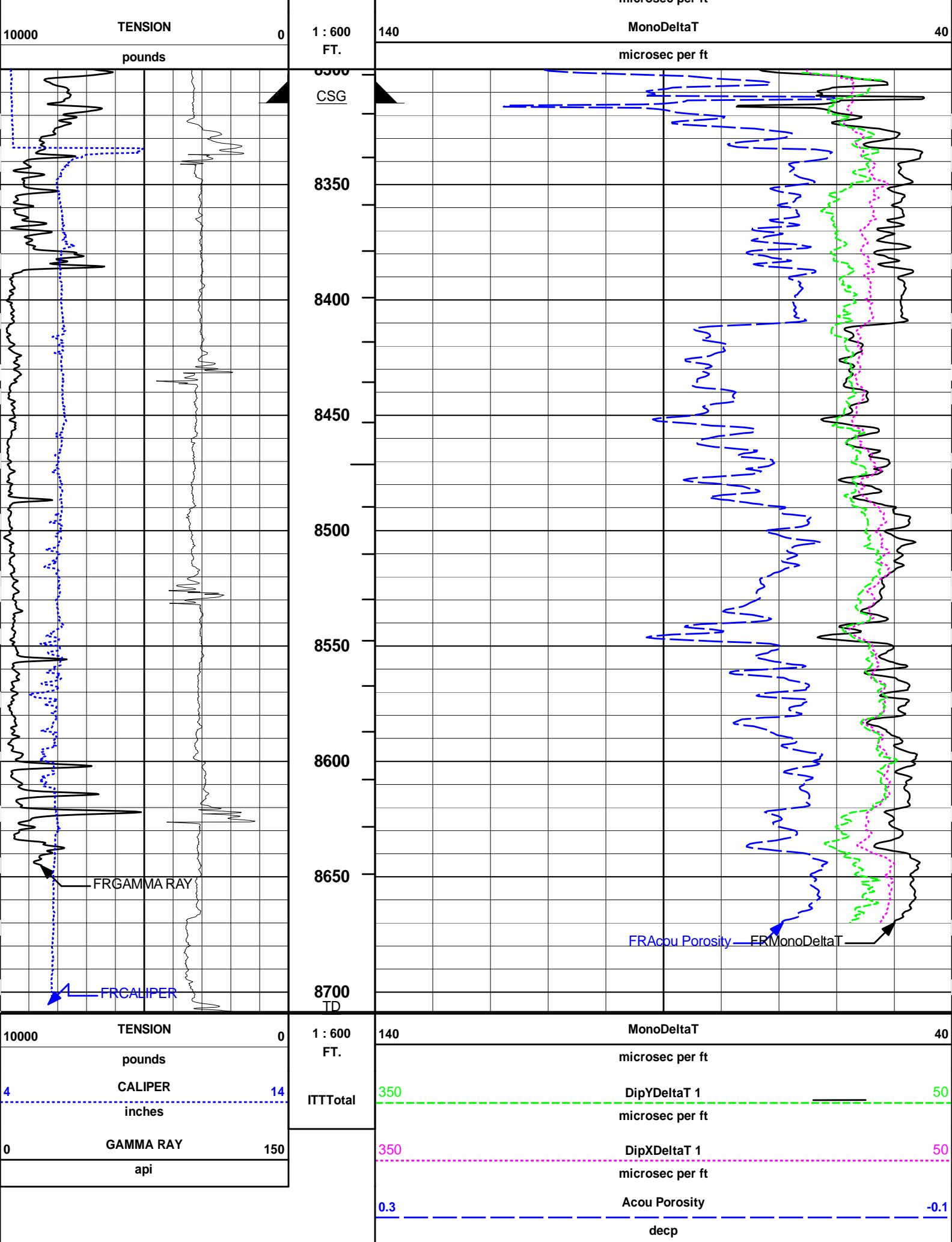
Depth (ft)	Tool Name	Mnemonic	Description	Value	Units
TOP					
	SHARED	BS	Bit Size	6.000	in
	SHARED	UBS	Use Bit Size instead of Caliper for all applications.	No	
	SHARED	MDBS	Mud Base	Water	
	SHARED	MDWT	Borehole Fluid Weight	8.900	ppg
	SHARED	WAGT	Weighting Agent	Natural	
	SHARED	BSAL	Borehole salinity	54000.00	ppm
	SHARED	FSAL	Formation Salinity NaCl	0.00	ppm
	SHARED	KPCT	Percent K in Mud by Weight?	0.00	%
	SHARED	RMUD	Mud Resistivity	0.114	ohmm
	SHARED	TRM	Temperature of Mud	66.8	degF
	SHARED	CSD	Logging Interval is Cased?	No	
	SHARED	ICOD	AHV Casing OD	4.500	in
	SHARED	ST	Surface Temperature	75.0	degF
	SHARED	TD	Total Well Depth	8725.00	ft
	SHARED	BHT	Bottom Hole Temperature	200.0	degF
	SHARED	SVTM	Navigation and Survey Master Tool	NONE	
	SHARED	AZTM	High Res Z Accelerometer Master Tool	GTET	
	SHARED	TEMM	Temperature Master Tool	NONE	
	Rwa / CrossPlot	XPOK	Process Crossplot?	Yes	
	Rwa / CrossPlot	FCHO	Select Source of F	Automatic	
	Rwa / CrossPlot	AFAC	Archie A factor	0.6200	

Rwa / CrossPlot	MFAC	Archie M factor	2.1500	
Rwa / CrossPlot	RMFR	Rmf Reference	0.10	ohmm
Rwa / CrossPlot	TMFR	Rmf Ref Temp	75.00	degF
Rwa / CrossPlot	RWA	Resistivity of Formation Water	0.05	ohmm
Rwa / CrossPlot	ADP	Use Air Porosity to calculate CrossplotPhi	No	
Rwa / CrossPlot	BHSM	Borehole Size Source Tool	MSFL	
GTET	GROK	Process Gamma Ray?	Yes	
GTET	GRSO	Gamma Tool Standoff	0.250	in
GTET	GEOK	Process Gamma Ray EVR?	No	
GTET	TPOS	Tool Position for Gamma Ray Tools.	Centered	
GTET	BHSM	Borehole Size Source Tool	MSFL	
CSNG	CGOK	Process CSNG Data?	Yes	
CSNG	CENT	Is Tool Centralized?	No	
CSNG	GBOK	Gamma Enviromental Corrections?	Yes	
CSNG	BARF	Barite Correction Factor	1.00	
CSNG	ORDG	Use Fixed Gain	No	
CSNG	ORDO	Use Fixed Offset	No	
CSNG	ORDR	Use Fixed Resolution Degradation Factor	No	
CSNG	BHSM	Borehole Size Source Tool	MSFL	
DLLT-I Sonde	DLOK	Process Dual Laterolog?	Yes	
DLLT-I Sonde	DBOK	Process Dual Laterolog Borehole Corrections?	Yes	
DLLT-I Sonde	SBHD	Select Borehole Diam Source	Caliper	
DLLT-I Sonde	TPOS	Tool Position	Standoff	
DLLT-I Sonde	TMPC	Temperature Correction Type	Tool Value	
DLLT-I Sonde	DLOK	Calculate Dual Laterolog DI?	Yes	
DLLT-I Sonde	BHSM	Borehole Size Source Tool	MSFL	
MSFL	DLOK	Process MSFL?	Yes	
MSFL	SLPD	Use MSFL Slim Hole Pad?	Yes	
MSFL	SPDF	MSFL Slim Hole Pad K Factor	1.750	
MSFL	CLOK	Process Caliper Outputs?	Yes	
BOTTOM				
Data: KINDER_CD_4\0001 TPL_DLLT_CSNG\002 02-Dec-14 15:54 Up @8585.5f			Date: 04-Dec-14 12:59:29	

HALLIBURTON	Plot Time: 04-Dec-14 13:13:03 Plot Range: 8300 ft to 8708.58 ft Data: KINDER_CD_4\Well Based\XRMI\ Plot File: \\WSTTV\TRIPLE_2"
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MAIN PASS 2" = 100'				
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		0.3	Acou Porosity	-0.1		
			decip			
0	GAMMA RAY	150	350	DipXDeltaT 1	50	
				microsec per ft		
4	CALIPER	14	ITTTotat	350	DipYDeltaT 1	50
					microsec per ft	

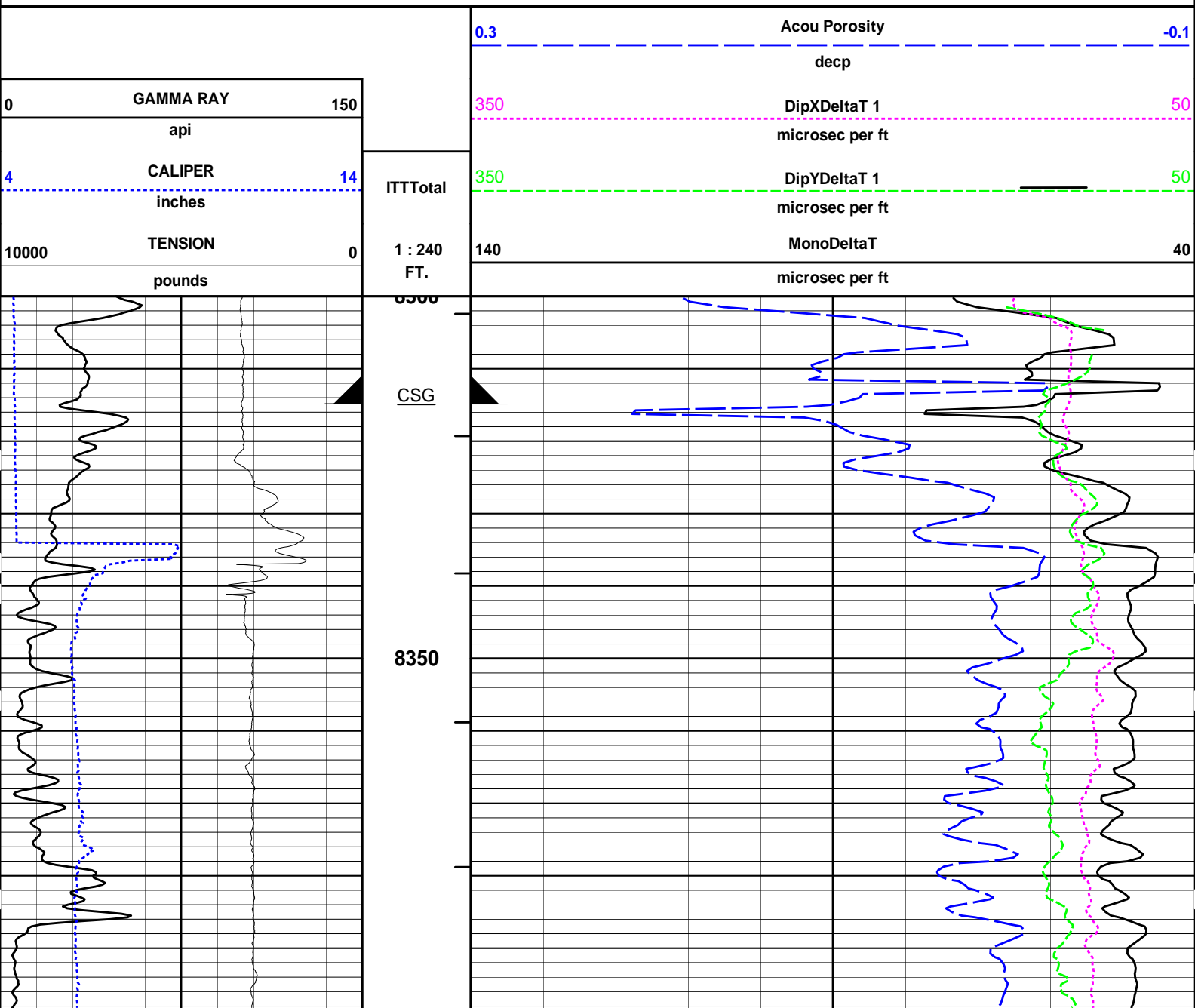


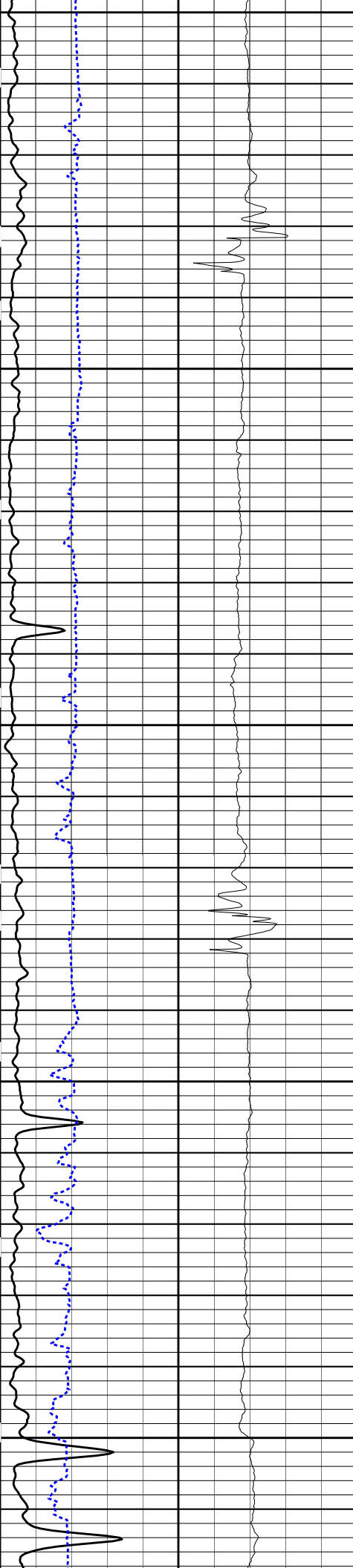
MAIN PASS 2" = 100'

HALLIBURTON

Plot Time: 04-Dec-14 13:13:04
Plot Range: 8300 ft to 8708.58 ft
Data: KINDER_CD_4\Well Based\XRMI\
Plot File: \\WSTTV\TRIPLE_M

MAIN PASS 5" = 100'





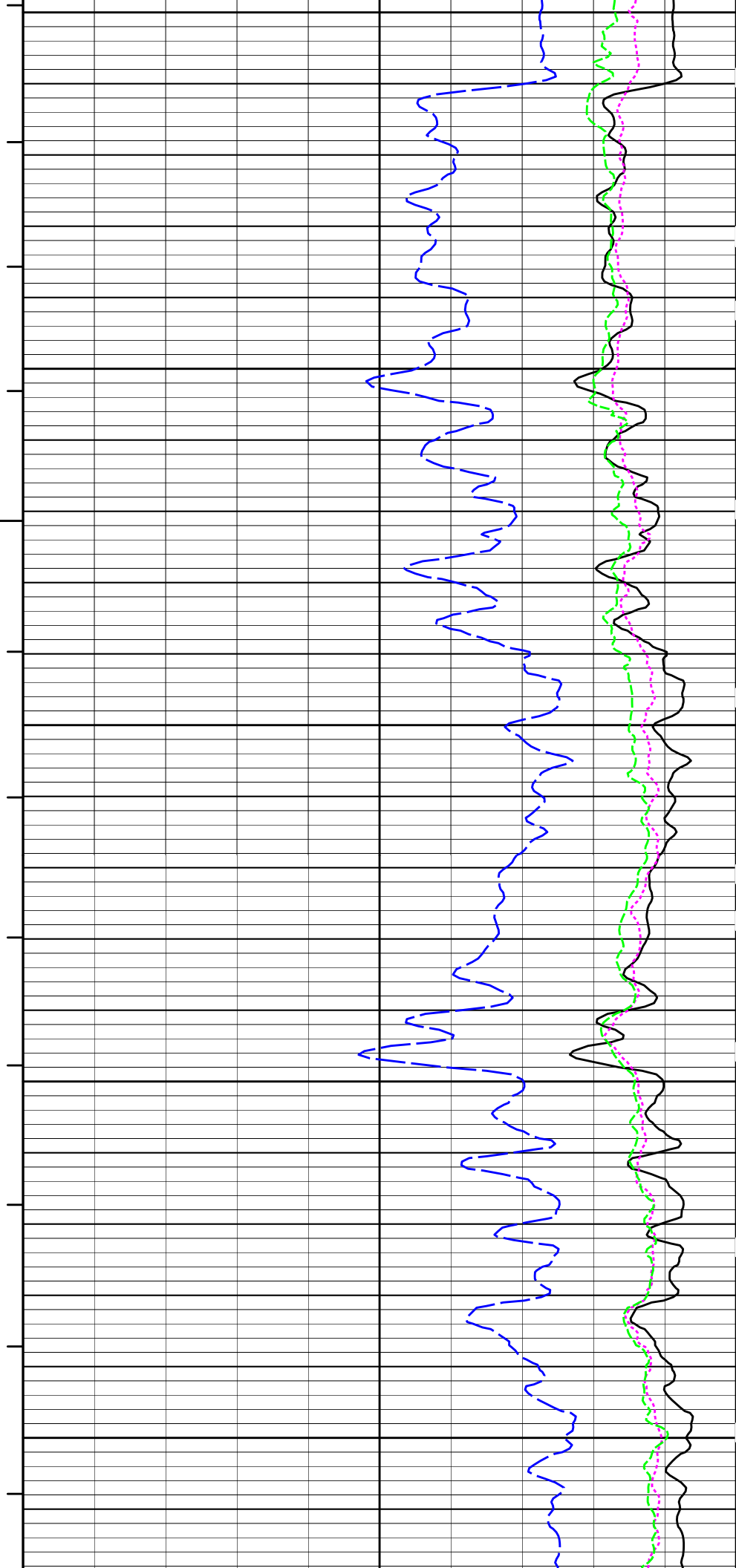
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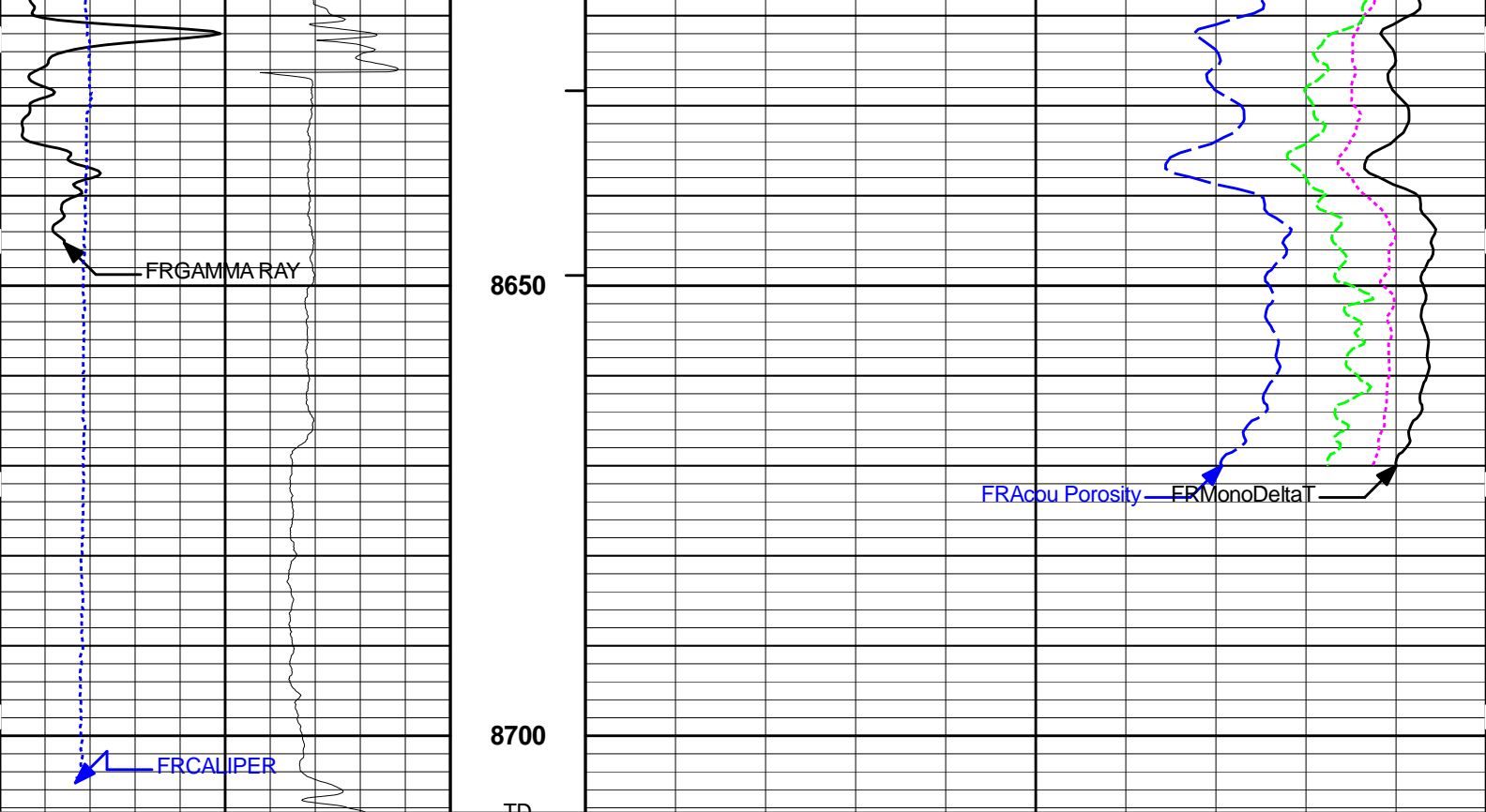
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8500

8550

8600





10000	TENSION	0	1 : 240 FT.	140	MonoDeltaT	40
	pounds				microsec per ft	
4	CALIPER	14	ITTTotal	350	DipYDeltaT 1	50
	inches				microsec per ft	
0	GAMMA RAY	150		350	DipXDeltaT 1	50
	api				microsec per ft	
				0.3	Acou Porosity	-0.1
					decp	

HALLIBURTON

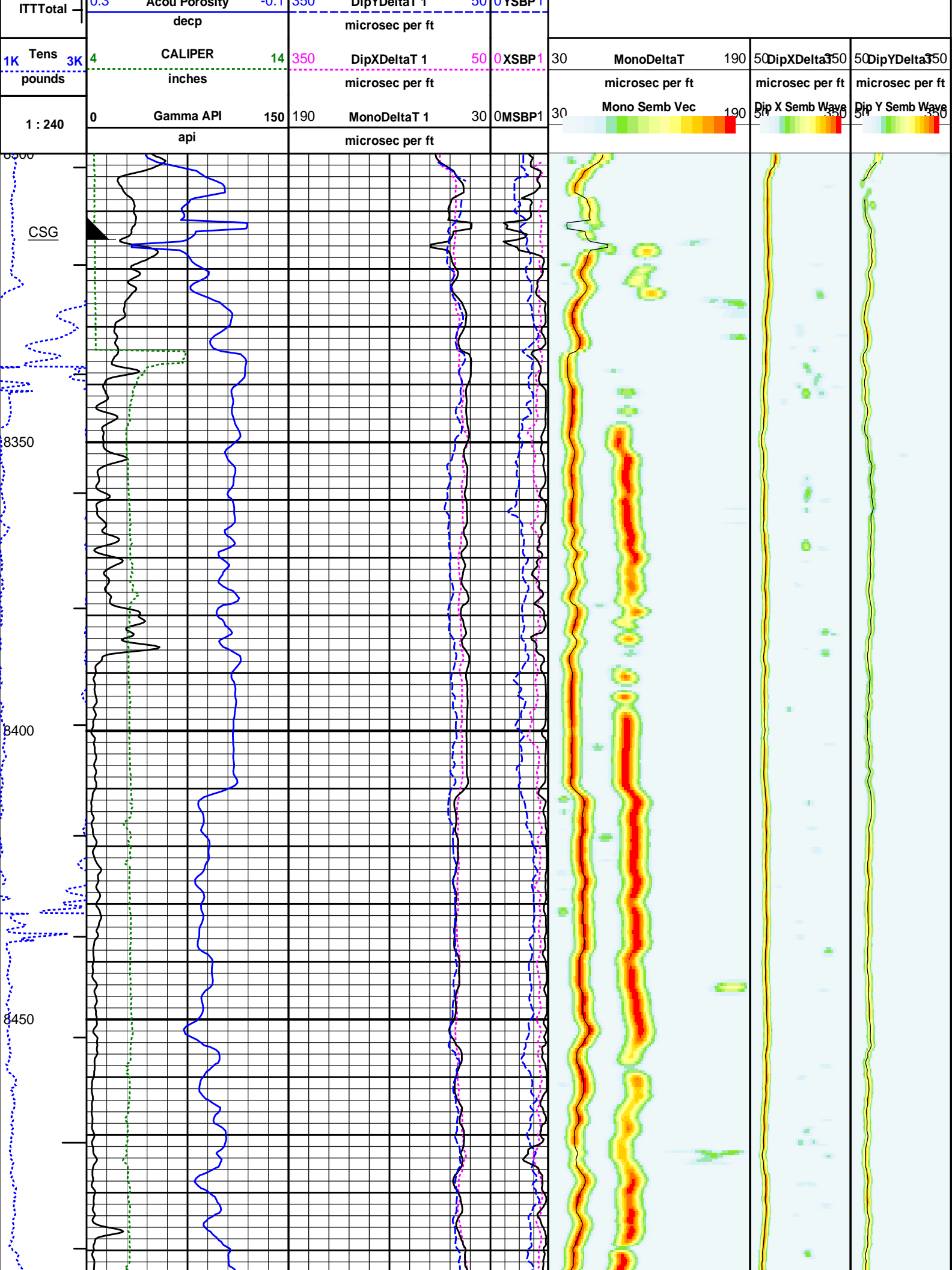
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Plot Range: 8300 ft to 8708.58 ft
Data: KINDER_CD_4\Well Based\XRMI\
Plot File: \\WSTT\TRIPLE_M

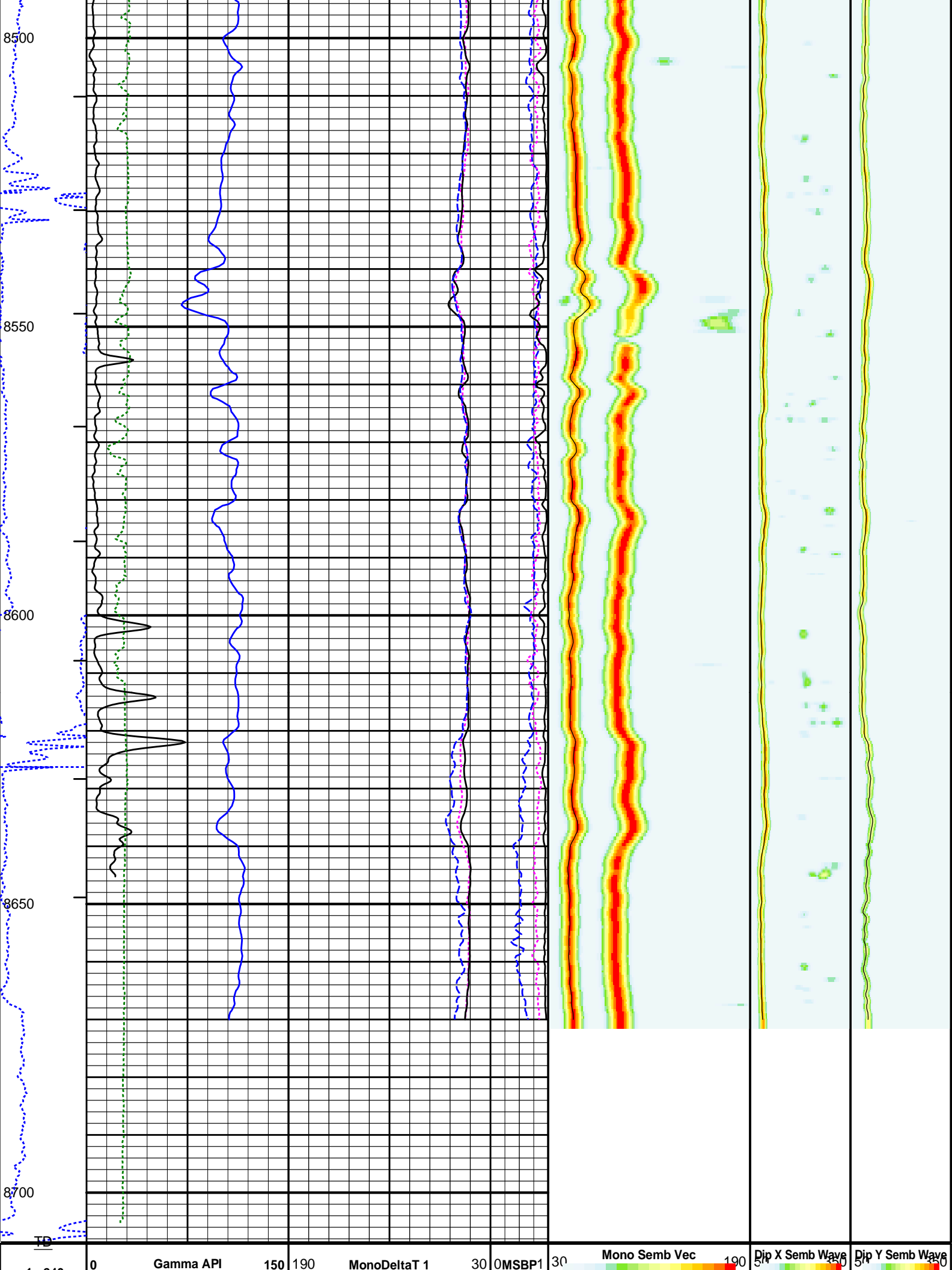
MAIN PASS 5" = 100'

HALLIBURTON

Plot Time: 04-Dec-14 13:13:06
Plot Range: 8300 ft to 8708.58 ft
Data: KINDER_CD_4\Well Based\XRMI\
Plot File: \\WSTT\WST-I Hard MAIN

MAIN PASS, 5" = 100'





-19118.2500	470.2500	-113.0000	0.9997	99.9668	1
-11962.0000	-822.2500	7587.0000	0.9997	99.9662	1
-17621.5000	-53.7500	-3638.2500	1.0004	99.9628	1

ACCELEROMETER QUALITY SUMMARY		
Average Calculated Gravity Field	1.0000	g
Standard Deviation Calculated Gravity Field	0.0005	g

ACCELEROMETER GAIN AND OFFSET		
	GAIN	OFFSET
ACC X	0.0000521266	-0.0026737903
ACC Y	0.0000521666	-0.0069890274
ACC Z	0.0001040054	-0.0114683267

* QF : value of 0 is shown for bad quality if | data - reference | > (3 * standard deviation) and > (1% of reference value)

MAGNETOMETER CALIBRATION RAW DATA VALUE					
Raw Mag X	Raw Mag Y	Raw Mag Z	Magnetic	Quality %	QF
3485.2500	10630.7500	-801.7500	51859.3867	99.6898	1
10587.0000	-3027.7500	-975.0000	51758.8086	99.8843	1
-674.5000	-10967.2500	-1103.5000	52012.7461	99.3931	1
-10914.7500	2394.5000	-912.2500	51903.6836	99.6041	1
-509.2500	-9423.0000	4480.5000	51387.2227	99.3969	1
-421.5000	-10903.2500	-587.2500	51587.2344	99.7838	1
-259.0000	-9886.2500	-4946.5000	51759.3516	99.8833	1
-9897.7500	-79.7500	-5162.2500	51536.0898	99.6849	1
-1829.5000	9770.7500	-5172.7500	51457.5313	99.5329	1
9722.0000	110.2500	-5204.0000	51193.6758	99.0226	1
9469.0000	1233.7500	4667.0000	51839.8711	99.7275	1
7191.5000	298.5000	-8432.7500	52055.1445	99.3111	1

MAGNETOMETER QUALITY SUMMARY		
Average Calculated Magnetic Field	51695.8945	nT
Standard Deviation Calculated Magnetic Field	264.5303	nT

MAGNETOMETER GAIN AND OFFSET		
	GAIN	OFFSET
MAG X	4.6669363976	169.2776031494
MAG Y	4.6775751114	-554.9345703125
MAG Z	5.0344729424	2815.9243164063

Noise Level Value: 12.339083 cnts

Noise Level Cal Value: 0.0013 g

DIPMETER SHOP CALIBRATION

Tool Name:	XRMI-I Mandrel - 11838466	Reference Calibration Date:	07-Nov-14 08:58:57
Engineer:	P. DIMPFL	Calibration Date:	07-Nov-14 09:05:08
Software Version:	WL INSITE R4.2.0 (Build 2)	Calibration Version:	1

Tool Temperature: 68.69 degF

PAD RESISTIVITIES							
Measurement	Measured	Calibrated	Measured	Calibrated	Measured	Calibrated	Units
Pads #1-3:	0.446	0.450	0.449	0.450	0.442	0.450	ohmm
Pads #4-6:	0.450	0.450	0.448	0.450	0.451	0.450	ohmm
Cal0 #1-3:	0.246	-----	0.251	-----	0.252	-----	ohmm
Cal0 #4-6:	0.247	-----	0.256	-----	0.252	-----	ohmm


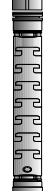


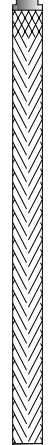


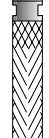
Calo #4-0:	0.247	0.250	0.252	0.255	0.258	0.261	0.264	0.267	0.270	0.273	0.276	0.279	0.282	0.285	0.288	0.291	0.294	0.297	0.300	0.303	0.306	0.309	0.312	0.315	0.318	0.321	0.324	0.327	0.330	0.333	0.336	0.339	0.342	0.345	0.348	0.351	0.354	0.357	0.360	0.363	0.366	0.369	0.372	0.375	0.378	0.381	0.384	0.387	0.390	0.393	0.396	0.399	0.402	0.405	0.408	0.411	0.414	0.417	0.420	0.423	0.426	0.429	0.432	0.435	0.438	0.441	0.444	0.447	0.450	0.453	0.456	0.459	0.462	0.465	0.468	0.471	0.474	0.477	0.480	0.483	0.486	0.489	0.492	0.495	0.498	0.501	0.504	0.507	0.510	0.513	0.516	0.519	0.522	0.525	0.528	0.531	0.534	0.537	0.540	0.543	0.546	0.549	0.552	0.555	0.558	0.561	0.564	0.567	0.570	0.573	0.576	0.579	0.582	0.585	0.588	0.591	0.594	0.597	0.600	0.603	0.606	0.609	0.612	0.615	0.618	0.621	0.624	0.627	0.630	0.633	0.636	0.639	0.642	0.645	0.648	0.651	0.654	0.657	0.660	0.663	0.666	0.669	0.672	0.675	0.678	0.681	0.684	0.687	0.690	0.693	0.696	0.699	0.702	0.705	0.708	0.711	0.714	0.717	0.720	0.723	0.726	0.729	0.732	0.735	0.738	0.741	0.744	0.747	0.750	0.753	0.756	0.759	0.762	0.765	0.768	0.771	0.774	0.777	0.780	0.783	0.786	0.789	0.792	0.795	0.798	0.801	0.804	0.807	0.810	0.813	0.816	0.819	0.822	0.825	0.828	0.831	0.834	0.837	0.840	0.843	0.846	0.849	0.852	0.855	0.858	0.861	0.864	0.867	0.870	0.873	0.876	0.879	0.882	0.885	0.888	0.891	0.894	0.897	0.900	0.903	0.906	0.909	0.912	0.915	0.918	0.921	0.924	0.927	0.930	0.933	0.936	0.939	0.942	0.945	0.948	0.951	0.954	0.957	0.960	0.963	0.966	0.969	0.972	0.975	0.978	0.981	0.984	0.987	0.990	0.993	0.996	0.999	1.002	1.005	1.008	1.011	1.014	1.017	1.020	1.023	1.026	1.029	1.032	1.035	1.038	1.041	1.044	1.047	1.050	1.053	1.056	1.059	1.062	1.065	1.068	1.071	1.074	1.077	1.080	1.083	1.086	1.089	1.092	1.095	1.098	1.101	1.104	1.107	1.110	1.113	1.116	1.119	1.122	1.125	1.128	1.131	1.134	1.137	1.140	1.143	1.146	1.149	1.152	1.155	1.158	1.161	1.164	1.167	1.170	1.173	1.176	1.179	1.182	1.185	1.188	1.191	1.194	1.197	1.200	1.203	1.206	1.209	1.212	1.215	1.218	1.221	1.224	1.227	1.230	1.233	1.236	1.239	1.242	1.245	1.248	1.251	1.254	1.257	1.260	1.263	1.266	1.269	1.272	1.275	1.278	1.281	1.284	1.287	1.290	1.293	1.296	1.299	1.302	1.305	1.308	1.311	1.314	1.317	1.320	1.323	1.326	1.329	1.332	1.335	1.338	1.341	1.344	1.347	1.350	1.353	1.356	1.359	1.362	1.365	1.368	1.371	1.374	1.377	1.380	1.383	1.386	1.389	1.392	1.395	1.398	1.401	1.404	1.407	1.410	1.413	1.416	1.419	1.422	1.425	1.428	1.431	1.434	1.437	1.440	1.443	1.446	1.449	1.452	1.455	1.458	1.461	1.464	1.467	1.470	1.473	1.476	1.479	1.482	1.485	1.488	1.491	1.494	1.497	1.500	1.503	1.506	1.509	1.512	1.515	1.518	1.521	1.524	1.527	1.530	1.533	1.536	1.539	1.542	1.545	1.548	1.551	1.554	1.557	1.560	1.563	1.566	1.569	1.572	1.575	1.578	1.581	1.584	1.587	1.590	1.593	1.596	1.599	1.602	1.605	1.608	1.611	1.614	1.617	1.620	1.623	1.626	1.629	1.632	1.635	1.638	1.641	1.644	1.647	1.650	1.653	1.656	1.659	1.662	1.665	1.668	1.671	1.674	1.677	1.680	1.683	1.686	1.689	1.692	1.695	1.698	1.701	1.704	1.707	1.710	1.713	1.716	1.719	1.722	1.725	1.728	1.731	1.734	1.737	1.740	1.743	1.746	1.749	1.752	1.755	1.758	1.761	1.764	1.767	1.770	1.773	1.776	1.779	1.782	1.785	1.788	1.791	1.794	1.797	1.800	1.803	1.806	1.809	1.812	1.815	1.818	1.821	1.824	1.827	1.830	1.833	1.836	1.839	1.842	1.845	1.848	1.851	1.854	1.857	1.860	1.863	1.866	1.869	1.872	1.875	1.878	1.881	1.884	1.887	1.890	1.893	1.896	1.899	1.902	1.905	1.908	1.911	1.914	1.917	1.920	1.923	1.926	1.929	1.932	1.935	1.938	1.941	1.944	1.947	1.950	1.953	1.956	1.959	1.962	1.965	1.968	1.971	1.974	1.977	1.980	1.983	1.986	1.989	1.992	1.995	1.998	2.001	2.004	2.007	2.010	2.013	2.016	2.019	2.022	2.025	2.028	2.031	2.034	2.037	2.040	2.043	2.046	2.049	2.052	2.055	2.058	2.061	2.064	2.067	2.070	2.073	2.076	2.079	2.082	2.085	2.088	2.091	2.094	2.097	2.100	2.103	2.106	2.109	2.112	2.115	2.118	2.121	2.124	2.127	2.130	2.133	2.136	2.139	2.142	2.145	2.148	2.151	2.154	2.157	2.160	2.163	2.166	2.169	2.172	2.175	2.178	2.181	2.184	2.187	2.190	2.193	2.196	2.199	2.202	2.205	2.208	2.211	2.214	2.217	2.220	2.223	2.226	2.229	2.232	2.235	2.238	2.241	2.244	2.247	2.250	2.253	2.256	2.259	2.262	2.265	2.268	2.271	2.274	2.277	2.280	2.283	2.286	2.289	2.292	2.295	2.298	2.301	2.304	2.307	2.310	2.313	2.316	2.319	2.322	2.325	2.328	2.331	2.334	2.337	2.340	2.343	2.346	2.349	2.352	2.355	2.358	2.361	2.364	2.367	2.370	2.373	2.376	2.379	2.382	2.385	2.388	2.391	2.394	2.397	2.400	2.403	2.406	2.409	2.412	2.415	2.418	2.421	2.424	2.427	2.430	2.433	2.436	2.439	2.442	2.445	2.448	2.451	2.454	2.457	2.460	2.463	2.466	2.469	2.472	2.475	2.478	2.481	2.484	2.487	2.490	2.493	2.496	2.499	2.502	2.505	2.508	2.511	2.514	2.517	2.520	2.523	2.526	2.529	2.532	2.535	2.538	2.541	2.544	2.547	2.550	2.553	2.556	2.559	2.562	2.565	2.568	2.571	2.574	2.577	2.580	2.583	2.586	2.589	2.592	2.595	2.598	2.601	2.604	2.607	2.610	2.613	2.616	2.619	2.622	2.625	2.628	2.631	2.634	2.637	2.640	2.643	2.646	2.649	2.652	2.655	2.658	2.661	2.664	2.667	2.670	2.673	2.676	2.679	2.682	2.685	2.688	2.691	2.694	2.697	2.700	2.703	2.706	2.709	2.712	2.715	2.718	2.721	2.724	2.727	2.730	2.733	2.736	2.739	2.742	2.745	2.748	2.751	2.754	2.757	2.760	2.763	2.766	2.769	2.772	2.775	2.778	2.781	2.784	2.787	2.790	2.793	2.796	2.799	2.802	2.805	2.808	2.811	2.814	2.817	2.820	2.823	2.826	2.829	2.832	2.835	2.838	2.841	2.844	2.847	2.850	2.853	2.856	2.859	2.862	2.865	2.868	2.871	2.874	2.877	2.880	2.883	2.886	2.889	2.892	2.895	2.898	2.901	2.904	2.907	2.910	2.913	2.916	2.919	2.922	2.925	2.928	2.931	2.934	2.937	2.940	2.943	2.946	2.949	2.952	2.955	2.958	2.961	2.964	2.967	2.970	2.973	2.976	2.979	2.982	2.985	2.988	2.991	2.994	2.997	3.000	3.003	3.006	3.009	3.012	3.015	3.018	3.021	3.024	3.027	3.030	3.033	3.036	3.039	3.042	3.045	3.048	3.051	3.054	3.057	3.060	3.063	3.066	3.069	3.072	3.075	3.078	3.081	3.084	3.087	3.090	3.093	3.096	3.099	3.102	3.105	3.108	3.111	3.114	3.117	3.120	3.123	3.126	3.129	3.132	3.135	3.138	3.141	3.144	3.147	3.150	3.153	3.156	3.159	3.162	3.165	3.168	3.171	3.174	3.177	3.180	3.183	3.186	3.189	3.192	3.195	3.198	3.201	3.204	3.207	3.210	3.213	3.216	3.219	3.222	3.225	3.228	3.231	3.234	3.237	3.240	3.243	3.246	3.249	3.252	3.255	3.258	3.261	3.264	3.267	3.270	3.273	3.276	3.279	3.282	3.285	3.288	3.291	3.294	3.297	3.300	3.303	3.306	3.309	3.312	3.315	3.318	3.321	3.324	3.327	3.330	3.333	3.336	3.339	3.342	3.345	3.348	3.351	3.354	3.357	3.360	3.363	3.366	3.369	3.372	3.375	3.378	3.381	3.384	3.387	3.390	3.393	3.396	3.399	3.402	3.405	3.408	3.411	3.414	3.417	3.420	3.423	3.426	3.429	3.432	3.435	3.438	3.441	3.444	3.447	3.450	3.453	3.456	3.459	3.462	3.465	3.468	3.471	3.474	3.477	3.480	3.483	3.486	3.489	3.492	3.495	3.498	3.501	3.504	3.507	3.510	3.513	3.516	3.519	3.522	3.525	3.528	3.531	3.534	3.537	3.540	3.543	3.546	3.549	3.552	3.555	3.558	3.561	3.564	3.567	3.570	3.573	3.576	3.579	3.582	3.585	3.588	3.591	3.594	3.597	3.600	3.603	3.606	3.609	3.612	3.615	3.618	3.621	3.624	3.627	3.630	3.633	3.636	3.639	3.642	3.645	3.648	3.651	3.654	3.657	3.660	3.663	3.666	3.669	3.672	3.675	3.678	3.681	3.684	3.687	3.690	3.693	3.696	3.699	3.702	3.705	3.708	3.711	3.714	3.717	3.720	3.723	3.726	3.729	3.732	3.735	3.738	3.741	3.744	3.747	3.750	3.753	3.756	3.759	3.762	3.765	3.768	3.771	3.774	3.777	3.780	3.783	3.786	3.789	3.792	3.795	3.798	3.801	3.804	3.807	3.810	3.813	3.816	3.819	3.822	3.825	3.828	3.831	3.834	3.837	3.840	3.843	3.846	3.849	3.852	3.855	3.858	3.861	3.864	3.867	3.870	3.873	3.876	3.879	3.882	3.885	3.888	3.891	3.894	3.897	3.900	3.903	3.906	3.909	3.912	3.915	3.918	3.921	3.924	3.927	3.930	3.933	3.936	3.939	3.942	3.945	
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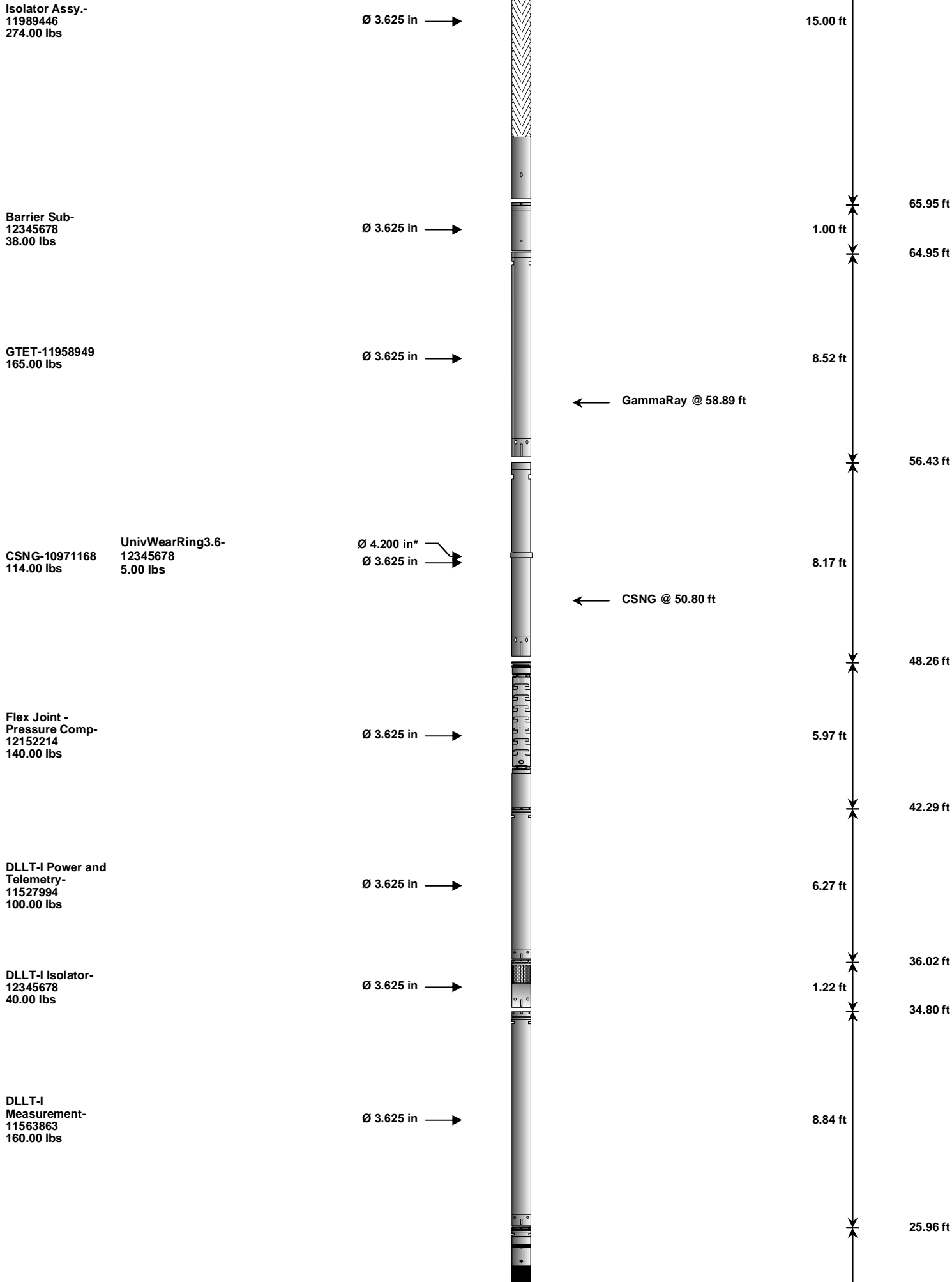
CAL 2-5	7.000	-----	-----	0.000	+/- 0.25	in
CAL 3-6	7.000	-----	-----	0.00	+/- 0.25	in

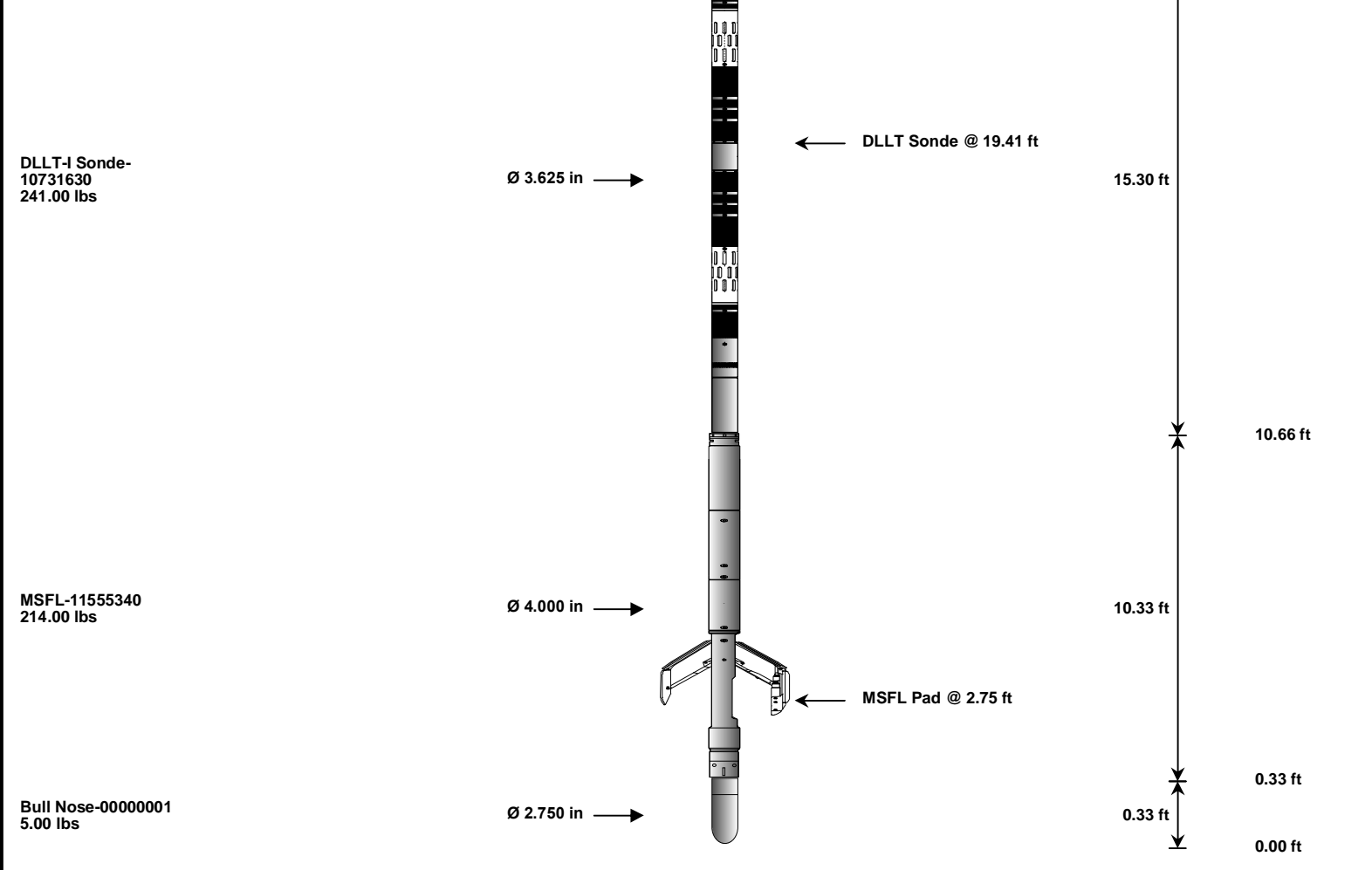
Data: KINDER_CD_4\0003 TPL_WSTT_XRMI\002 04-Dec-14 12:01 Up @8709.8f	Date: 04-Dec-14 12:58:20
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HALLIBURTON

TOOL STRING DIAGRAM REPORT

Description	Overbody Description	O.D.	Diagram	Sensors @ Delays	Length	Accumulated Length
Spacer-12345678 100.00 lbs	Regal Standoff 6_75-00000001 20.00 lbs	Ø 3.625 in Ø 5.000 in*			4.70 ft	120.64 ft
Flex Joint - Pressure Comp-10756977 140.00 lbs		Ø 3.625 in			5.97 ft	115.94 ft
DTDD-10267604 90.00 lbs		Ø 3.625 in		← Load Cell @ 108.88 ft ← Pad Locator @ 107.29 ft	3.66 ft	109.97 ft
HDDS-A-00000001 125.00 lbs		Ø 4.060 in			4.13 ft	106.31 ft
Isolator Assy.-11987166 274.00 lbs		Ø 3.625 in			15.00 ft	102.19 ft
Return Electrode-11037643 57.00 lbs		Ø 3.625 in			2.50 ft	87.19 ft
SP Sub-11057551 60.00 lbs		Ø 3.625 in		← SP @ 82.91 ft	3.74 ft	84.69 ft
						80.95 ft





Mnemonic		Tool Name	Serial Number	Weight (lbs)	Length (ft)	Accumulated Length (ft)	Max.Log. Speed (fpm)
SPC	Test		12345678	100.00	4.70	115.94	100.00
RSOF	Regal Standoff 6.75in		00000001	20.00	0.52	*	117.76
FLEX	Flex Joint - Pressure Compensated		10756977	140.00	5.97	109.97	300.00
DTDD	Downhole Tension Device		10267604	90.00	3.66	106.31	300.00
HDDS-A	Heavy Duty DITS Swivel tool.		00000001	125.00	4.13	102.19	300.00
ISA	Isolator Assembly - Rigid Bridle		11987166	274.00	15.00	87.19	300.00
RE	Return Electrode - Rigid Bridle		11037643	57.00	2.50	84.69	300.00
SP	SP Sub		11057551	60.00	3.74	80.95	300.00
ISA	Isolator Assembly - Rigid Bridle		11989446	274.00	15.00	65.95	300.00
w	Barrier Sub - Rigid Bridle		12345678	38.00	1.00	64.95	300.00
GTET	Gamma Telemetry Tool		11958949	165.00	8.52	56.43	60.00
CSNG	Compensated Spectral Natural Gamma		10971168	114.00	8.17	48.26	15.00
UWR3P6	Universal Wear Ring 3 5-8 inch		12345678	5.00	0.35	*	52.34
FLEX	Flex Joint - Pressure Compensated		12152214	140.00	5.97	42.29	300.00
DLLT	Dual Laterolog Power and Telemetry		11527994	100.00	6.27	36.02	100.00
DLLT	Dual Laterolog Isolator		12345678	40.00	1.22	34.80	100.00
DLLT	Dual Laterolog Measurement		11563863	160.00	8.84	25.96	100.00
DLLT	Dual Laterolog Sonde		10731630	241.00	15.30	10.66	100.00
MSFL	Micro Spherically Focused Log		11555340	214.00	10.33	0.33	60.00
BLNS	Bull Nose		00000001	5.00	0.33	0.00	300.00
Total				2,362.00	120.64		
* Not included in Total Length and Length Accumulation.							
Data: KINDER_CD_4\0001 TPL_DLLT_CSNG\002 02-Dec-14 15:54 Up @8585.5f							
Date: 04-Dec-14 12:58:45							

COMPANY	KINDER MORGAN CO2 CO LP
WELL	CD 4

FIELD	MCELMO		
COUNTY	MONTEZUMA	STATE	CO
HALLIBURTON		WAVESONIC *FIELD COPY*	