

HALLIBURTON

SUNDANCE ENERGY INC

**MLD 12-22
Wattenberg
Weld County , Colorado**

Cement Production Casing

24-Nov-2012

Job Site Documents

Field Ticket

Field Ticket Number: 900025724		Field Ticket Date: Saturday, November 24, 2012	
Bill To:		Job Name: MLD Order Type: Streamline Order (ZOH) Well Name: MLD 12-22 Company Code: 1100 Customer PO No.: NA Shipping Point: Brighton, CO, USA Sales Office: Rocky Mountains BD Well Type: Gas Well Category: Development	
Ship To: SUNDANCE MLD 12-22,WELD MLD 12-22 2965121 S22 T4N R68W BERTHOUD, CO 80513			

Material	Description	QTY	UOM	Base Amt	Unit Amt	Gross Amount	Discount	Net Amount
7523	CMT PRODUCTION CASING BOM	1	JOB	0.00	0.00	0.00		0.00
16091	ZI - PUMPING CHARGE DEPTH FEET/METERS (FT/M)	1 7165	EA FT	0.00	9,081.00	9,081.00	65%	3,178.35
432904	CMT, ROCKIES SG SETUP	1	EA			10,162.00	50.67%	5,012.70
432905	CMT, ROCKIES SG MILEAGE Number of Units	56 1	MI			1,257.20	61.7%	481.51
432906	CMT, ROCKIES SG DELIVERY NUMBER OF TONS	1 23.2	TNM			6,003.87	63.38%	2,198.47
528788	MUD FLUSH III	24	BBL	0.00	94.45	2,266.80	65%	793.38
452963	FRACCEM (TM) SYSTEM	160	SK			10,132.85	65.0%	3,546.51
101894003	ENHANCER 923	800	LB	0.00	1.05	840.00	65%	294.00
101985045	CHEM, CLA-WEB - TOTE	7	GAL	0.00	474.30	3,320.10	65%	1,162.03
452981	EXTENDACEM (TM) SYSTEM	325	SK			16,624.31	65.0%	5,818.50
100003668	SUPER CBL	52	LB	0.00	72.35	3,762.20	65%	1,316.77
100003652	SALT,MORTON-PUREX-FINE	768	LB	0.00	0.44	337.92	65%	118.27
100007955	SHOE-FLT- 4 1/2 8RD - HI-PORT	1	EA	0.00	918.00	918.00	65%	321.30
100004752	CLR,FLT,4-1/2 8RD,9.5-13.5PPF,2-3/4	1	EA	0.00	700.00	700.00	65%	245.00
100004491	CTRZR ASSY,TURBO,API,4 1/2 CSG X 7 7/8	15	EA	0.00	166.00	2,490.00	65%	871.50

Field Ticket

Field Ticket Number: 900025724 **Field Ticket Date:** Saturday, November 24, 2012

Bill To:

Ship To:
 SUNDANCE MLD 12-22,WELD
 MLD 12-22
 2965121
 S22 T4N R68W
 BERTHOUD, CO 80513

Job Name: MLD
Order Type: Streamline Order (ZOH)
Well Name: MLD 12-22
Company Code: 1100
Customer PO No.: NA
Shipping Point: Brighton, CO, USA
Sales Office: Rocky Mountains BD
Well Type: Gas
Well Category: Development

Material	Description	QTY	UOM	Base Amt	Unit Amt	Gross Amount	Discount	Net Amount
100004622	CLAMP - LIMIT - 4-1/2 - HINGED -	1	EA	0.00	44.20	44.20	65%	15.47
101241019	PLUG,CMTG, TOP,4 1/2,HWE,3.65 MIN/4.14 MA	1	EA	0.00	186.00	186.00	65%	65.10
100005045	KIT,HALL WELD-A	1	EA	0.00	74.30	74.30	65%	26.00
100004595	BSKT,CEM,4 1/2 CSG X 6 1/4,8 3/4 H	2	EA	0.00	390.00	780.00	65%	273.00
100004473	CENTRALIZER ASSY - API - 4-1/2 CSG X	30	EA	0.00	126.00	3,780.00	65%	1,323.00
100008028	SUGAR, GRANULATED, IMPERIAL	50	LB	0.00	6.44	322.00	65%	112.70
Totals						USD		
						73,082.75	45,909.19	27,173.56

Halliburton Rep: BRANDON NIELSON
 Customer Agent: GENE HUDSON
 Halliburton Approval

THIS OUTPUT DOES NOT INCLUDE TAXES. APPLICABLE SALES TAX WILL BE BILLED ON THE FINAL INVOICE.
 CUSTOMER HEREBY ACKNOWLEDGES RECEIPT OF THE MATERIALS AND SERVICES DESCRIBED ABOVE AND ON THE ATTACHED DOCUMENTS.

X _____ FIELD TICKET TOTAL: USD 27,173.56

Customer Signature

Was our HSE performance satisfactory? Y or N Were you satisfied with our Equipment? Y or N Were you satisfied with our people? Y or N
 (Health, Safety, Environment)

Comments

The Road to Excellence Starts with Safety

Sold To #: 344834	Ship To #: 2965121	Quote #:	Sales Order #: 900025724
Customer: SUNDANCE ENERGY INC		Customer Rep: HUDSON, GENE	
Well Name: MLD	Well #: 12-22	API/UWI #: 05-123-36101	
Field: Wattenberg	City (SAP): BERTHOUD	County/Parish: Weld	State: Colorado
Lat: N 40.304 deg. OR N 40 deg. 18 min. 13.878 secs.		Long: W 104.994 deg. OR W -105 deg. 0 min. 21.049 secs.	
Contractor: Ensign	Rig/Platform Name/Num: 55		
Job Purpose: Cement Production Casing			
Well Type: Development Well		Job Type: Cement Production Casing	
Sales Person: AARON, WESLEY		Srvc Supervisor: NIELSON, BRANDON	MBU ID Emp #: 479703

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BOURGEOIS, KEVIN Paul	6.5	459092	HINKLE, BRADLEY Dean	6.5	512123	MULLER, MICHEL B	6.5	529830
NIELSON, BRANDON K	6.5	479703						

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10246780C	28 mile	10988836C	28 mile	11106651	28 mile	11667703C	28 mile
12010172	28 mile						

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours

TOTAL Total is the sum of each column separately

Job

Job Times

Formation Name	Formation Depth (MD)	Top	Bottom	Called Out	Date	Time	Time Zone
				On Location	23 - Nov - 2012	21:00	MST
Form Type			BHST	On Location	24 - Nov - 2012	00:30	MST
Job depth MD	7165. ft		Job Depth TVD	Job Started	24 - Nov - 2012	05:00	MST
Water Depth			Wk Ht Above Floor	Job Completed	24 - Nov - 2012	06:15	MST
Perforation Depth (MD)	From		To	Departed Loc	24 - Nov - 2012	07:00	MST

Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Open Hole				7.875				581.	7217.	581.	7217.
Production Casing	Unknown		4.5	4.	11.6				7165.		7165.
Surface Casing	Unknown		8.625	8.097	24.				581.		581.

Sales/Rental/3rd Party (HES)

Description	Qty	Qty uom	Depth	Supplier
SHOE-FLT- 4 1/2 8RD - HI-PORT	1	EA		
CLR,FLT,4-1/2 8RD,9.5-13.5PPF,2-3/4	1	EA		
CTRZR ASSY,TURBO,API,4 1/2 CSG X 7 7/8	15	EA		
CLAMP - LIMIT - 4-1/2 - HINGED -	1	EA		
PLUG,CMTG,TOP,4 1/2,HWE,3.65 MIN/4.14 MA	1	EA		
KIT,HALL WELD-A	1	EA		
BSKT,CEM,4 1/2 CSG X 6 1/4,8 3/4 H	2	EA		
CENTRALIZER ASSY - API - 4-1/2 CSG X	30	EA		

Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
------	------	-----	------	-------	------	------	-----	------	-------	------	------	-----	------

Guide Shoe				Packer				Top Plug			
Float Shoe				Bridge Plug				Bottom Plug			
Float Collar				Retainer				SSR plug set			
Insert Float								Plug Container			
Stage Tool								Centralizers			

Miscellaneous Materials

Gelling Agt		Conc		Surfactant		Conc		Acid Type		Qty		Conc	%
Treatment Fld		Conc		Inhibitor		Conc		Sand Type		Size		Qty	

Fluid Data

Stage/Plug #: 1

Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk		
1	Clay Web Water Spacer		20.00	bbbl	8.4	.0	.0	.0			
2	MUD FLUSH III	MUD FLUSH III - SBM (528788)	24.00	bbbl	8.4	.0	1000.0	5.0			
3	CalyWeb Water Spacer		10.00	bbbl	8.4	.0	.0	.0			
4	Extendacem 11.3#	EXTENDACEM (TM) SYSTEM (452981)	325.0	sacks	11.3	2.46	14.12		14.12		
	0.2 %	SUPER CBL, 50 LB PAIL (100003668)									
	3 %	SALT, 100 LB BAG (100003652)									
	14.12 Gal	FRESH WATER									
5	Fraccem 13.5#	FRACCEM (TM) SYSTEM (452963)	160.0	sacks	13.5	1.74	8.3	5.0	8.3		
	5 lbm	ENHANCER 923, BULK (101894003)									
	8.3 Gal	FRESH WATER									
6	ClayWeb Water Displacement		111.00	bbbl	8.34	.0	.0	7.0			
	2.5 gal/Mgal	CLA-WEB - TOTE (101985045)									

Calculated Values

Pressures

Volumes

Displacement		Shut In: Instant		Lost Returns	0	Cement Slurry		Pad	
Top Of Cement		5 Min		Cement Returns	0	Actual Displacement		Treatment	
Frac Gradient		15 Min		Spacers	0	Load and Breakdown		Total Job	

Rates

Circulating		Mixing		Displacement		Avg. Job	
Cement Left In Pipe	Amount	0 ft	Reason	Shoe Joint			
Frac Ring # 1 @	ID	Frac ring # 2 @	ID	Frac Ring # 3 @	ID	Frac Ring # 4 @	ID

The Information Stated Herein Is Correct

Customer Representative Signature

The Road to Excellence Starts with Safety

Sold To #: 344834	Ship To #: 2965121	Quote #:	Sales Order #: 900025724
Customer: SUNDANCE ENERGY INC		Customer Rep: HUDSON, GENE	
Well Name: MLD	Well #: 12-22	API/UWI #: 05-123-36101	
Field: Wattenberg	City (SAP): BERTHOUD	County/Parish: Weld	State: Colorado
Legal Description:			
Lat: N 40.304 deg. OR N 40 deg. 18 min. 13.878 secs.		Long: W 104.994 deg. OR W -105 deg. 0 min. 21.049 secs.	
Contractor: Ensign		Rig/Platform Name/Num: 55	
Job Purpose: Cement Production Casing			Ticket Amount:
Well Type: Development Well		Job Type: Cement Production Casing	
Sales Person: AARON, WESLEY		Srvc Supervisor: NIELSON, BRANDON MBU ID Emp #: 479703	

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Test Lines	11/24/2012 05:05							TESTED LINES TO 3500 PSI NO VISIBLE LEAKS
Pump Spacer 1	11/24/2012 05:08		5	20			255.0	FRESH WATER MIXED WITH CLAWEB
Pump Spacer 2	11/24/2012 05:15		5	24			310.0	FRESH WATER MIXED WITH MUD FLUSH
Pump Spacer 1	11/24/2012 05:18		5	10			340.0	FRESH WATER MIXED WITH CLAWEB
Pump Lead Cement	11/24/2012 05:19		12	142			405.0	325 SKS EXTENDACEM MIXED @ 11.3 # WITH FRESH WATER
Pump Tail Cement	11/24/2012 05:34		6	49.5			245.0	160 SKS FRACCEM MIXED @ 13.5 # WITH FRESH WATER
Shutdown	11/24/2012 05:56							
Clean Lines	11/24/2012 05:57							
Drop Top Plug	11/24/2012 05:57							PLUG PRE LOADED WITNESSED BY COMPANY REP
Pump Displacement	11/24/2012 05:58		8	111			727.0	FRESH WATER WITH CLAWEB
Bump Plug	11/24/2012 06:14		3				1155.0	CALCULATED PRESSURE TO LAND WAS 929 PSI
Check Floats	11/24/2012 06:15						2500.0	FLOATS HELD
End Job	11/24/2012 06:15							

Water Analysis For Cement Mixing Water

Company:	SUNDANCE ENERGY INC	Lease: MLD	Well Name, Nbr: MLD, 12-22
Rig Name/Nbr:	55	API No. /UWI	05-123-36101
County:	Weld	State: Colorado	Country: United States of America

FIELD TEST KIT

NOTE: These tests are an indication of POTENTIAL contamination and are not conclusive.
For more comprehensive results, a sample should be submitted to the Local Area Lab

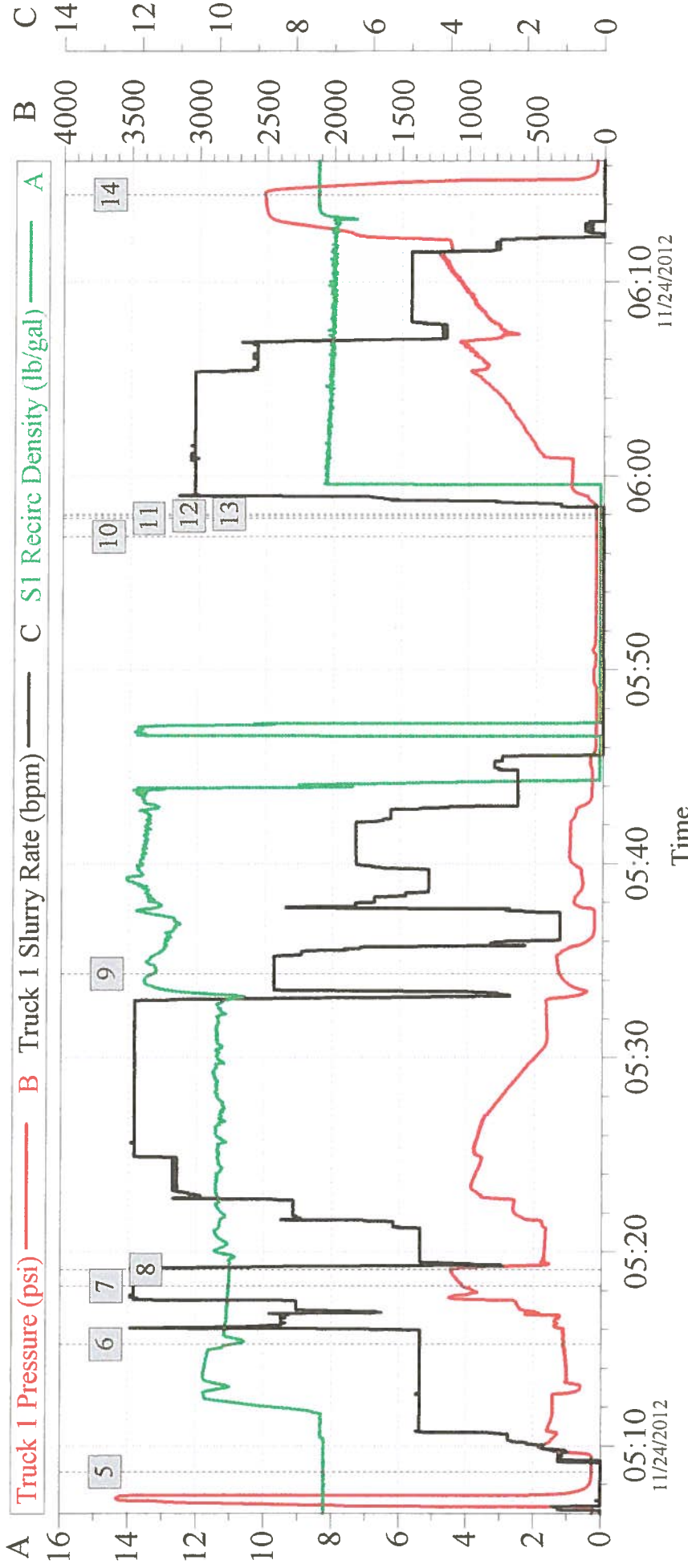
Date <u>24-Nov-2012</u>	Ticket Number <u>900025724</u>
Service Supervisor <u>NIELSON, BRANDON</u>	Water Source <u>DAY TANK</u>

Temperature _____	[<80 F]
pH. _____	[between 6-8 pH]
Specific Gravity _____	[1.000 - 1.005 see Chart]
Chart in Kit shows comparisons of: Chlorides	[<3,000 ppm @ 1.004 S.G.]
Calcium	[<500 ppm @ 1.004 S.G.]

PASS	FAIL	<u>Nessler's Nitrogen</u>	<i>[Passing Parameters]</i>
<input type="checkbox"/>	<input type="checkbox"/>	Color of Yellow _____	<i>[<4.5 ppm (mg/L)]</i>
		<u>Tannin-Lignin</u>	
<input type="checkbox"/>	<input type="checkbox"/>	Color of Blue _____	<i>[<25.0 ppm]</i>
		<u>Sulfate</u>	
		Degree of Clarity _____	<i>[200 ppm]</i>
<input type="checkbox"/>	<input type="checkbox"/>	Black X Visible _____	<i>[if NO >200 ppm = FAIL]</i>
		<u>Iron (Fe)</u>	
<input type="checkbox"/>	<input type="checkbox"/>	Degree of Orange _____	<i>[<20.0 ppm]</i>

SUNDANCE MLD 12-22

4.5 PRODUCTION



Global Event Log

Intersection	T1P	Intersection	T1P	Intersection	T1P
1 Starting Job	04:03:01 59.00	2 Start Job	05:05:43 64.00	3 Prime Pumps	05:05:48 64.00
4 Test Lines	05:05:55 63.00	5 Pump Spacer 1	05:08:39 65.00	6 Pump Spacer 2	05:15:14 276.4
7 Pump Spacer 1	05:18:13 1027	8 Pump Lead Cement	05:19:05 1112	9 Pump Tail Cement	05:34:20 316.8
10 Shutdown	05:56:52 55.00	11 Clean Lines	05:57:49 55.00	12 Drop Top Plug	05:57:57 55.00
13 Pump Displacement	05:58:02 55.00	14 Bump Plug	06:14:31 2518		

Customer: SUNDANCE
 Well Description: PRODUCTION

Job Date: 24-Nov-2012
 UWI: 05-123-36101

Sales Order #: 900025724
 ENSING 55