

EXXONMOBIL CORPORATION

HOUSTON, Texas

WELL: PCU 296-5A1 (Intermediate)
RIG: H&P-321

Post Job Summary

Cement Intermediate Casing

Prepared for: Isaac Whorl
Date Prepared: 9/16/10
Version: 1

Service Supervisor: Cody Davis

Submitted by: Kyle King

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Wellbore Geometry

Job Tubulars					MD		TVD		Excess %	Shoe Joint Length ft
Type	Description	Size in	ID in	Wt lbm/ft	Top ft	Bottom ft	Top ft	Bottom ft		
Casing	Surface Casing	10.75	9.950	45.50	0.0	4,650.0	0.0	4,548.0		
Open Hole	Intermediate Open Hole		9.875		4,650.0	10,120.0	4,548.0	10,018.0	100.00	
Casing	Intermediate Casing	7.00	6.276	26.00	0.0	10,105.0	0.0	10,003.0		98.35

Pumping Schedule

Fluid #	Fluid Type	Fluid Name	Density lbm/gal	Avg Rate bbl/min	Volume
1	Spacer	Tuned Spacer III	10.00	4.0	80 bbl
2	Cement	Primary (Tuned Light)	11.00	5.0	1350 sks
3	Displacement	Drilling Mud	9.60	5.5	376.5 bbl

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Fluids Pumped

Fluid 1: Spacer
Tuned Spacer III
59.8 lbm/bbl Barite

Fluid Density: 10.00 lbm/gal
Volume: 80.0 bbl
Pump Rate: 4.0 bbl/min

Fluid 2: Primary Cement
Tuned Light
0.75 lbm HR-601

Fluid Weight: 11.00 lbm/gal
Slurry Yield: 2.21 ft³/sack
Water Requirement: 9.67 Gal
Volume: 1350 sacks
Recorded Volume: 522 bbl
Calculated Top of Fluid: 4,134.00 ft
Pump Rate: 5.0 bbl/min

Fluid 3: Displacement
Drilling Mud

Fluid Density: 9.6 lbm/gal
Volume: 376.5 bbl
Pump Rate: 5.5 bbl/min

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Job Summary

Job Information

Job MD	10,105.0 ft
Job TVD	10,003.0 ft
Height of Plug Container/Swage Above Rig Floor	6.0 ft
Surface Temperature at Time of Job	60 degF
Mud Type	Water Based Mud
Name of Mud Company	BAROID
Mud Density	9.6 lbm/gal
Mud PV	17 cp
Mud YP	20 lb/100 sqft
Mud Gels	9/17/22
Time Circulated before job	4.42 hour(s)
Mud Volume Circulated	1,060.00 bbl
Rate at Which Well was Circulated	4.0 bbl/min
Mud loss while Circulating	225.00 bbl
Pipe Movement During Hole Circulation	Reciprocated
Time From End Mud Circ. To Job Start	13.00 minute
Mud loss during Cement Job	281.00 bbl
Pipe Movement During Cementing	Reciprocated
Calculated Displacement	383.0 bbl
Recorded Displacement	376.5 bbl
Recorded Bump Pressure	675 psi
Job Displaced by (rig/halco)	Cement Unit HP Pumps
Length of Rat Hole	15.00 ft

Cementing Equipment

Number of Centralizers Used	55
Pipe Centralization	Through Entire Cement Column
Did Float Equipment Hold?	Yes
Plug set used?	Yes
Brand of Plug set used?	Weatherford
Did Plugs Bump?	Yes
Calculated Pressure to Bump Plugs	476.0 psig

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Service Supervisor Reports

Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pressure (psig)	Comments
09/15/2010 19:00		Casing on Bottom				@ 10,105 ft
09/15/2010 19:10		Circulate Well				Rig Circulating Well @ 4 BPM, 250 PSI, 0 Gas Units
09/15/2010 22:05		Rig-Up Equipment				Rig Floor Up, Stab Head and attach Manifold
09/15/2010 22:08		Other				Rig laying down CRT
09/15/2010 22:25		Circulate Well				Rig Circulating Well @ 4 BPM, 250 PSI, 0 Gas Units through Cement head
09/15/2010 22:30		Pre-Job Safety Meeting				With Rig Crew and Company Man
09/15/2010 23:25	1	Start Job		3		Fill Lines
09/15/2010 23:27	2,3,4,5	Pressure Test				Low 250 psi, High 5000 psi
09/15/2010 23:38	6	Pump Spacer	4	79	400.0	DEN 10.0#, Design 80 bbl, Recorded 79
09/15/2010 23:58		Shutdown				
09/16/2010 00:00	7	Pump Cement	5	522	500.0	DEN 11.0#, YLD 2.21 cuft/sk, WR 9.67 gal/sk Design (Slurry Volume 532 bbl, Mix Water Volume 311 bbl) Recorded (Slurry Volume 522 bbl, Mix Water 311 Volume bbl) *****Volumes taken from BellyMag Meter
09/16/2010 00:01	8	Drop Bottom Plug				
09/16/2010 01:48		Shutdown				Wash up on top of Plug per Company Man 10 bbl
09/16/2010 01:50	9	Pump Displacement	5.5	376.5	550.0	Design 383 bbl Recorded 376.5
09/16/2010 01:50	10	Drop Top Plug				
09/16/2010 01:51		Pressure Up	8	5	600.0	Caught Cement with 5 bbl away into displacement
09/16/2010 01:58		Slow Rate	5	55	275.0	Slow Rate to 5 bpm with 55 bbl away displacement
09/16/2010 03:02		Slow Rate	3	355	600.0	Slow Rate to 3 bpm with 355 bbl away into displacement
09/16/2010 03:04		Bump Plug	3	376.5	675.0	Design 476 psi Recorded 675 psi

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Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pressure (psig)		Comments
09/16/2010 03:11		Check Floats				1300.0	Pressure up to 1300 psi, hold for 7 minutes. Floats hold, 1.5 bbl flow back
09/16/2010 03:12		End Job					
09/16/2010 03:15		Pre-Rig Down Safety Meeting					

The Road to Excellence Starts with Safety

Sold To #: 331699	Ship To #: 2749984	Quote #:	Sales Order #: 7627747
Customer: EXXONMOBIL CORPORATION		Customer Rep: McClain, Eric	
Well Name: PCU		Well #: 296-5A1	API/UWI #: 05103112480000
Field:	City (SAP): MEEKER	County/Parish: Rio Blanco	State: Colorado
Legal Description: Section 5 Township 2S Range 96W			
Contractor: H&P		Rig/Platform Name/Num: H&P321	
Job Purpose: Cement Intermediate Casing			
Well Type: Development Well		Job Type: Cement Intermediate Casing	
Sales Person: TURNER, JAMIE		Srvc Supervisor: DAVIS, CODY	MBU ID Emp #: 446891

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BEREECE, TERRY Lee		222819	BURROWS, DARREN Michael		475039	DAVIS, CODY R		446891
KING, KYLE Endres		465538	PARTRIDGE, BRENT W		471227	WHITE, KAMEREON V		475856
WILLIAMS, CAMERON Kent		438405						

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
9/15/10	9	0.5	9/16/10	5	3.6	-	-	-
TOTAL			Total is the sum of each column separately					

Job

Job Times

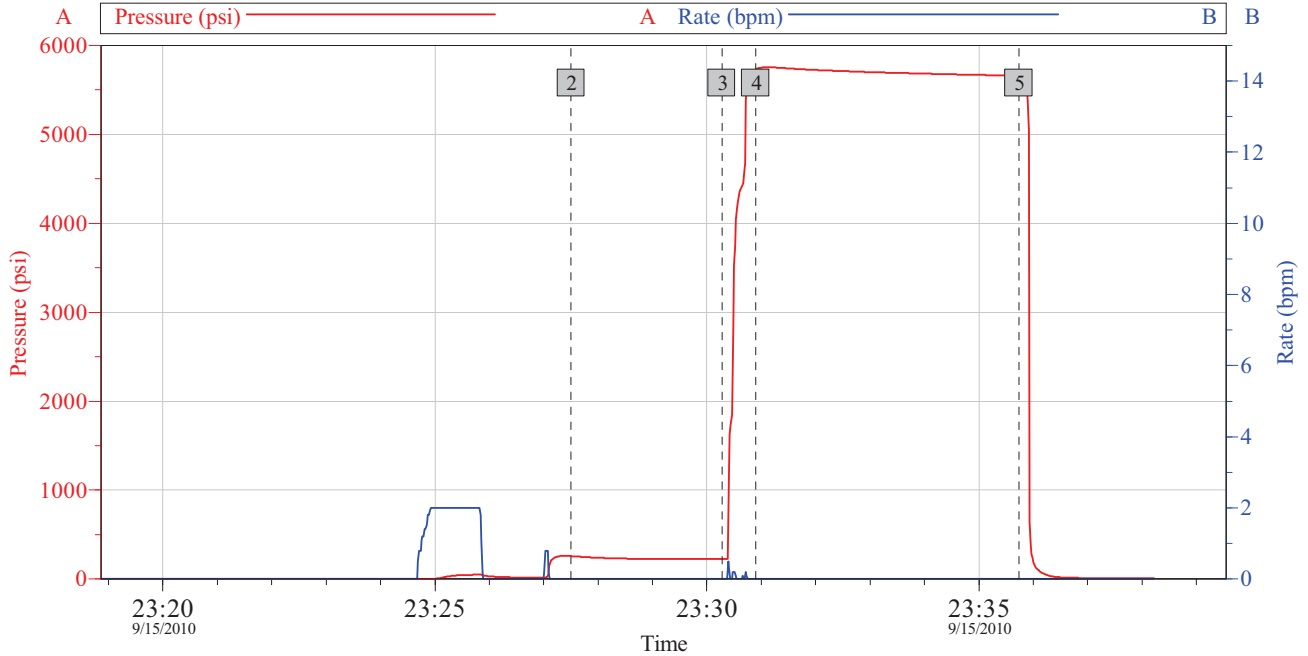
Formation Name						Date	Time	Time Zone
Formation Depth (MD)	Top		Bottom		Called Out	15 - Sep - 2010	00:00	MST
Form Type		BHST		210 degF	On Location	15 - Sep - 2010	00:00	MST
Job depth MD	10105. ft	Job Depth TVD	10003. ft		Job Started	15 - Sep - 2010	23:25	MST
Water Depth		Wk Ht Above Floor	6. ft		Job Completed	16 - Sep - 2010	03:12	MST
Perforation Depth (MD)	From		To		Departed Loc			

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
Intermediate Open Hole				9.875				4650.	10120.	4548.	10018.
Intermediate Casing	Unknown		7.	6.276	26.	HYDRIL - SERIES 500 TYPE 513	P-110	0	10105.	0	10003.
Surface Casing	Unknown		10.75	9.95	45.5	BTC	J-55	0	4650.	0	4548

Fluid Data									
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid bbl
1	SPACER	TUNED SPACER III - SBM (483826)		bbl	10.0	5.69	38.85	4.0	73.07
	38.32 gal/bbl	FRESH WATER							
	59.8 lbm/bbl	BARITE, 100 LB SK (100003680)							
2	Cement	TUNED LIGHT (TM) SYSTEM (452984)		sacks	11.0	2.21	9.67	5.0	311
	0.75 lbm	HR-601, 50 LB BAG (101328348)							
	9.67 Gal	FRESH WATER							
3	Displacement	Drilling Mud		bbl	9.6			5.5	376.5
The Information Stated Herein Is Correct			Customer Representative Signature						

PCU 296-5A1 Intermediate Pressure Test

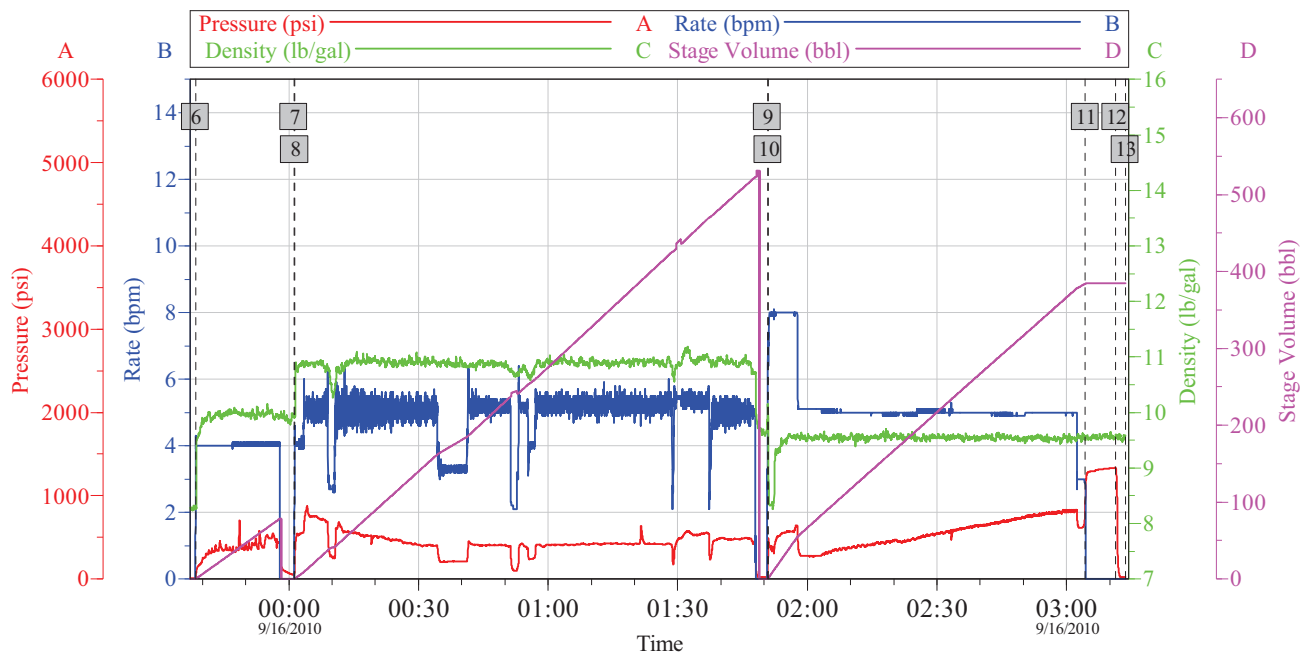


Job Log					
Intersection			psi		
2	Start Low Pressure Test	23:27:30	258.8	3	End Low Pressure Test 23:30:17 225.0
4	Start High Pressure Test	23:30:54	5732	5	End High Pressure Test 23:35:44 5660

Customer: EXXONMOBIL	Job Date: 15-Sep-2010	Sales Order #: 7627747
Well Description: PCU 296-5A1	UWI: 05103112480000	Rig: H&P 321

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15-Sep-10 23:38

PCU 296-5A1 Intermediate



Job Log

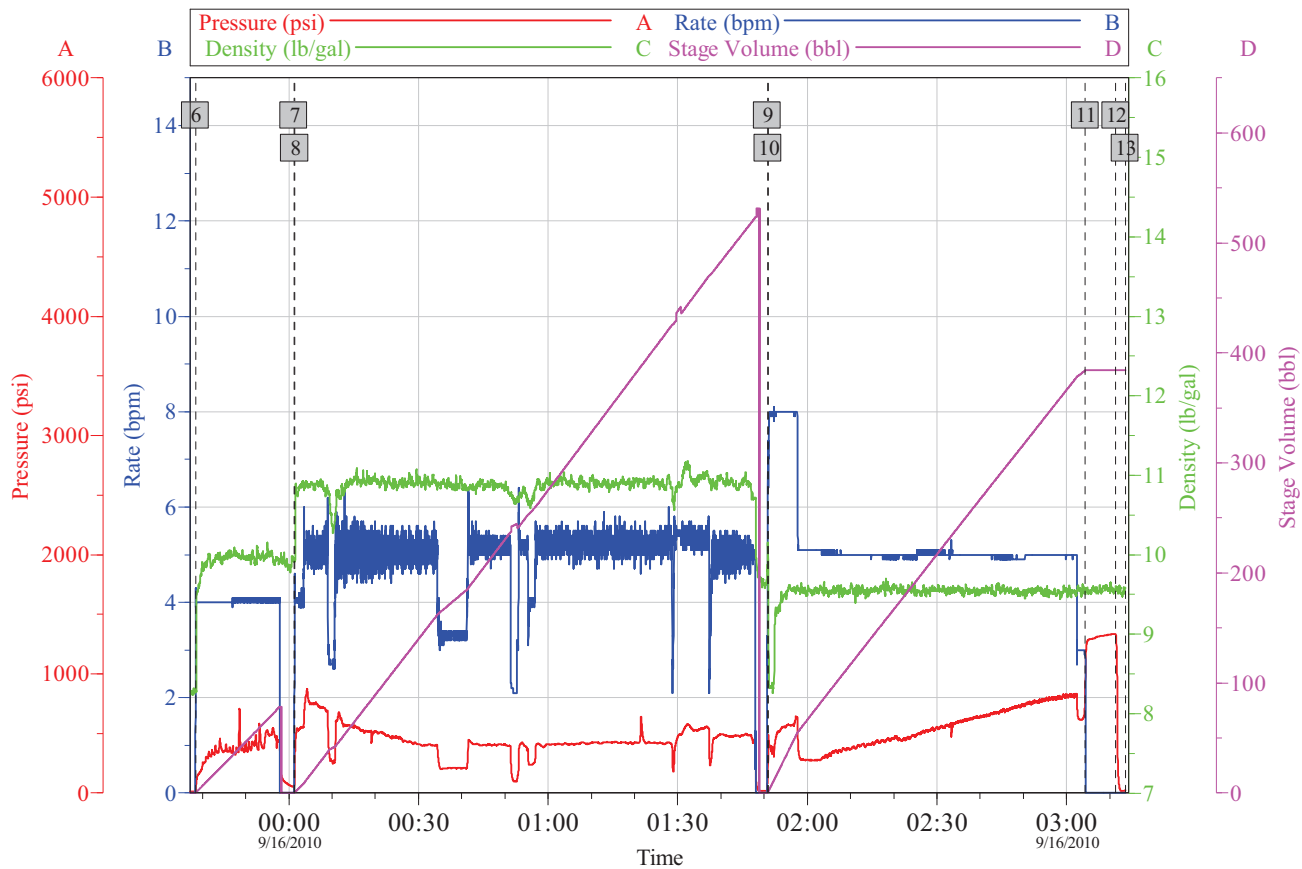
6	TS III 10.0#	9/15/2010 23:38:25	7	Cement (Tuned Light) 11.0#	9/16/2010 00:01:12
8	Drop Bottom Plug	9/16/2010 00:01:23	9	Displacement Mud 9.6#	9/16/2010 01:50:46
10	Drop Top Plug	9/16/2010 01:50:59	11	Bump Plug	9/16/2010 03:04:21
12	Check Floats	9/16/2010 03:11:24	13	Ending Job	9/16/2010 03:13:38

Customer: EXXONMOBIL	Job Date: 15-Sep-2010	Sales Order #: 7627747
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16-Sep-10 03:15

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PCU 296-5A1 Intermediate



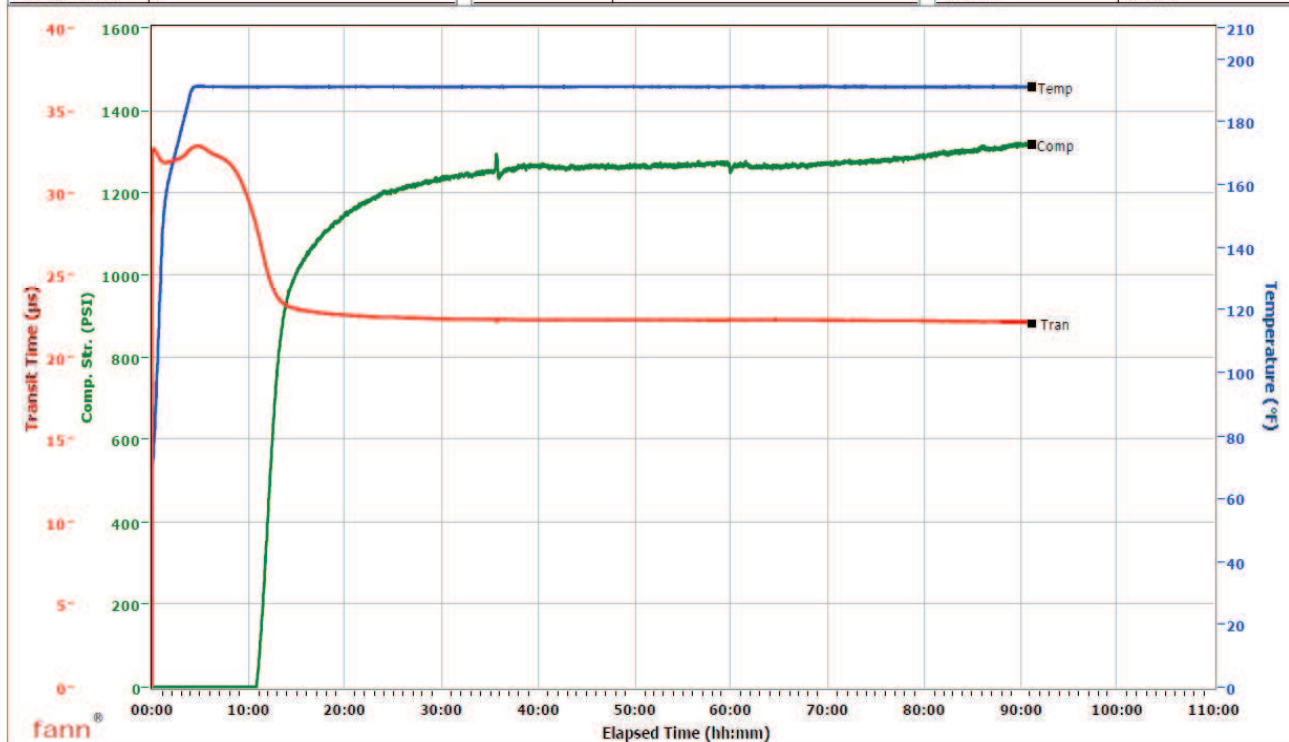
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OptiCem v6.4.9
16-Sep-10 03:16

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Vernal

Fields	Values	Fields	Values	Events	Results
Project Name	EXXONMOBIL 98654-1	Job Type	INTERMEDIATE PRIMARY	50.00 PSI	11h:03m
Test ID	98654-1	Cement Type	V	100.00 PSI	11h:13m
Request ID	UCA #5	Cement Weight	Light Weight	500.00 PSI	12h:14m
Tested by	PBL	Test Date	9/9/2010	1000.00 PSI	14h:54m
Customer	ExxonMobil	Test Time	9:57 PM	12h:00m	400.33
Well No	PCU 296-5A1	Temp. Units	degF	24h:00m	1199.81
Rig	H&P 321	Pressure Units	PSI	48h:00m	1260.81
Casing/Liner Size	7			72h:00m	1273.17



Data File C:\Data Files\98654-1.tdms

Comments TYPE V/POZ 53.19/36.88%, HR-601 0.75 LB/SK, DEN 10.999, YLD 2.21