Waste Disposal Well#Z 30-045-35747

OIL CONS. DIV DIST. 3

BLM/STATE

HALLIBURTON

iCem® Service

WESTERN REFINING SOUTHWEST INC

For: LARRY CANDELARIA

Date: Wednesday, August 31, 2016

WWD#2

WWD#2 WWD #2 WESTERN REFINING 2STAGE Job Date: Tuesday, August 30, 2016

Sincerely,

JACOB AYERS

Customer: WESTERN REFINING SOUTHWEST INC

Job: WESTERN REFINING WWD#2 2STAGE

Case: WWD #2 WESTERN REFINING 2STAGE | SO#: 903512352

2.0 Real-Time Job Summary

2.1 Job Event Log Activity Graph Label Date Seq. Time Source PS Pump DH PS Pump Pump Stg Comments Type No. Press Density Tot Rate (bbl) (psi) (ppg) (bbl/min) 1 Call Out Call Out 8/30/2016 00:00:00 USER call out @ 330 Event Depart Yard Safety Depart Yard Safety Event 2 8/30/2016 05:22:23 USER meeting with crew @ Meeting Meeting Depart from Service Depart from Service 8/30/2016 05:22:32 USER Event 3 departed from yard @ Center or Other Site Center or Other Site Arrive at Location from Arrive at Location from Event 8/30/2016 05:22:35 USER arrived on location @ 800 Other Job or Site Other Job or Site Pre-Rig Up Safety Pre-Rig Up Safety 8/30/2016 05:22:46 USER tailgaite meeting with crew Event 5 Meeting Meeting safety meeting with all Pre-Job Safety Meeting Pre-Job Safety Meeting 8/30/2016 17:45:00 USER -51.70 8.73 0.00 0.0 affected personel on Event location 7 Start Job Start Job 8/30/2016 18:20:04 COM5 Event 18:29:13 8 Pump Spacer Pump Spacer 8/30/2016 USER -14.708.35 0.00 0.0 3bbl. fresh ahead Event test pumps and lines to 4819.30 Event 9 Pressure Test Pressure Test 8/30/2016 18:33:22 USER 8.11 0.00 2.7 4800 psi 50 bbl tuned spacer @13.8# Pump TUNED Spacer 8/30/2016 18:41:11 USER 62.30 8.21 0.2 Event 10 Pump Spacer 1 1.10 1.95 yield 32.2 gal/sks 260sks @15.6# 1.2yield Pump 1st Stage Lead Pump 1st Stage Lead 177.30 15.41 0.0 5.11gal/sks= 55.6bbl cmt 11 8/30/2016 18:56:15 USER 3.50 Event Slurry Slurry 31.7bbl mwrg 200sks @15.6# 1.2 yield Pump 1st Stage Tail 5.11gal/sks = 42.75 bblcmt Event 12 Pump 1st Stage Tail Slurry 8/30/2016 19:12:29 USER 136.30 15.69 3.50 57.0 Slurry

22.30

16.83

0.00

0.0

24.4bbl mwrg

Event

13

Drop Plug

Drop Plug

8/30/2016

19:28:38 USER

Customer: WESTERN REFINING SOUTHWEST INC
Job: WESTERN REFINING WWD#2 2STAGE
Case: WWD #2 WESTERN REFINING 2STAGE | SO#: 903512352

Event 15 Bump Plug Bump Plug 8/30/2016 20:35:26 USER 96:30 13:36 0.90 27:39 actuall bump 542 pix plants of the control of the	Event	14	Pump Displacement	Pump Displacement	8/30/2016	19:31:50	USER	10.30	16.11	1.70	0.0	calculated displacement 261.5 bbl actually pumped 258.5bbl
Event 17 Drop Opening Device For Multiple Stage Drop Opening Device 8/30/2016 20:44:03 USER 21:30 13:31 0.00 3.2 Opened tool at 1273	Event	15	Bump Plug	Bump Plug	8/30/2016	20:29:24	USER	966.30	13.36	0.90	275.9	calculated 550 psi to bump actuall bump 542 psi
Event 17 For Multiple Stage Cementer Drop Opening Device R/30/2016 8/30/2016 20:44:03 USER 21:30 13:31 0.00 3.2 opened tool at 1271 Event 18 Open Multiple Stage Cementer Open Multiple Stage Cementer 8/30/2016 20:59:23 USER 431:30 13:43 4.10 1.4 opened tool at 1271 Event 19 Circulate Well Roll The Cmt Off The Top 8/30/2016 21:01:45 USER 162:30 13:32 5.00 13:1 roll the cmt off the the tool 16/0bl Event 20 Cement Returns to Surface 8/30/2016 21:24:29 USER 205:30 13:36 5.00 127.7 caclulated cmt back surface 13bl actual back to surface 13bl actual displacement / bbl Event 21 Start Job Start Job 8/31/2016 03:37:23 USER 2200:30 8.43 <	Event	16	Set Packer	Set Packer	8/30/2016	20:35:26	USER	2445.30	13.41	0.70	2.8	set the packer below MSC
Event 18 Cementer	Event	17	For Multiple Stage	Drop Opening Device	8/30/2016	20:44:03	USER	21.30	13.31	0.00	3.2	opened tool at 1271 psi
Event 20 Cement Returns to Surface Surface Surface 21:24:29 USER 205.30 13.36 5.00 127.7 caclulated crnt back surface 41bbl actual back to surface 15bl Event 21 Start Job Start Job 8/31/2016 03:28:47 COM5 Event 22 Pressure Test Pressure Test 8/31/2016 03:37:23 USER 2200.30 8.43 0.00 3.0 TEST PUMPS AND LIST PUMPS AND LI	Event	18			8/30/2016	20:59:23	USER	431.30	13.43	4.10	1.4	
Event 20 Cement Returns to Surface Cement Returns to Surface 8/30/2016 21:24:29 USER 205.30 13.36 5.00 127.7 surface 41bbl actual back to surface 15bl Event 21 Start Job Start Job 8/31/2016 03:28:47 COM5 Event 22 Pressure Test Pressure Test 8/31/2016 03:37:23 USER 2200.30 8.43 0.00 3.0 TEST PUMPS AND LIST Schools and Developed and Develope	Event	19	Circulate Well	Roll The Cmt Off The Top	8/30/2016	21:01:45	USER	162.30	13.32	5.00	13.1	roll the cmt off the top of the tool 160bbl
Event 22 Pressure Test Pressure Test 8/31/2016 03:37:23 USER 2200.30 8.43 0.00 3.0 TEST PUMPS AND LI 5000psi Event 23 Pump Spacer Pump Tuned Spacer 8/31/2016 03:48:47 USER 137.30 14.22 3.90 5.9 50 bbl tuned spacer #2.17 yield 12.8 gal Event 24 Pump 2nd Stage Lead Slurry Pump 2nd Stage Lead Slurry	Event	20			8/30/2016	21:24:29	USER	205.30	13.36	5.00	127.7	caclulated cmt back to surface 41bbl actual cmt back to surface 15bbl
Event 22 Pressure Test 8/31/2016 03:37:23 USER 2200.30 8.43 0.00 3.0 5000psi Event 23 Pump Spacer Pump Tuned Spacer 8/31/2016 03:48:47 USER 137.30 14.22 3.90 5.9 50 bbl tuned spacer #2.17 yield 12.8 gal Event 24 Pump 2nd Stage Lead Slurry Pump 2nd Stage Lead Slurry 8/31/2016 04:00:40 USER 179.30 13.64 5.00 3.9 6.66gal/sks = 208bb 126.85 bbl mwrq Event 25 Pump 2nd Stage Tail Slurry Pump 2nd Stage Tail Slurry 8/31/2016 04:51:22 USER 447.30 15.38 5.10 5.9 5.09 gal/sks = 40.9 to 24.5bbl mwrq Event 26 Drop Plug Drop Plug 8/31/2016 05:01:20 USER 2.30 4.29 2.00 0.1 shut down drop plug Event 27 Pump Displacement Pump Displacement 8/31/2016 05:02:18 USER 335.30 7.78 5.50 5.0 callculated displacement/bbl displacement/bbl </td <td>Event</td> <td>21</td> <td>Start Job</td> <td>Start Job</td> <td>8/31/2016</td> <td>03:28:47</td> <td>COM5</td> <td></td> <td></td> <td></td> <td></td> <td></td>	Event	21	Start Job	Start Job	8/31/2016	03:28:47	COM5					
Event 23 Pump Spacer Pump Tuned Spacer 8/31/2016 03:48:47 USER 137.30 14.22 3.90 5.9 #2.17 yield 12.8 gal Event 24 Pump 2nd Stage Lead Slurry Pump 2nd Stage Lead Slurry 8/31/2016 04:00:40 USER 179.30 13.64 5.00 3.9 800 sks @13.2#1.46 Event 25 Pump 2nd Stage Tail Slurry Pump 2nd Stage Tail Slurry 8/31/2016 04:51:22 USER 447.30 15.38 5.10 5.9 200 200 24.5bblmwrq Event 26 Drop Plug Drop Plug 8/31/2016 05:01:20 USER 2.30 4.29 2.00 0.1 shut down drop plug Event 27 Pump Displacement Pump Displacement 8/31/2016 05:02:18 USER 335.30 7.78 5.50 5.0 callculated displacement /bbl displacement /bbl	Event	22	Pressure Test	Pressure Test	8/31/2016	03:37:23	USER	2200.30	8.43	0.00	3.0	TEST PUMPS AND LINES 5000psi
Event 24 Pump 2nd Stage Lead Slurry Slurry Slurry 8/31/2016 04:00:40 USER 179.30 13.64 5.00 3.9 6.66gal/sks = 208bb 126.85 bbl mwrq Event 25 Pump 2nd Stage Tail Slurry Pump 2nd Stage Tail Slurry 8/31/2016 04:51:22 USER 447.30 15.38 5.10 5.9 200sks @15.8# 1.15 5.09 gal/sks = 40.9 kg 24.5bbl mwrq Event 26 Drop Plug Drop Plug 8/31/2016 05:01:20 USER 2.30 4.29 2.00 0.1 shut down drop plug callculated displacement	Event	23	Pump Spacer	Pump Tuned Spacer	8/31/2016	03:48:47	USER	137.30	14.22	3.90	5.9	50 bbl tuned spacer @14.5 #2.17 yield 12.8 gal/sks
Event 25 Pump 2nd Stage Tail Slurry 8/31/2016 04:51:22 USER 447.30 15.38 5.10 5.9 5.09 gal/sks = 40.9 backs =	Event	24			8/31/2016	04:00:40	USER	179.30	13.64	5.00	3.9	800 sks @13.2# 1.46 yield 6.66gal/sks = 208bbl cmt 126.85 bbl mwrq
Event 27 Pump Displacement Pump Displacement 8/31/2016 05:02:18 USER 335.30 7.78 5.50 5.0 195.8bbl actuall displacement /bbl	Event	25			8/31/2016	04:51:22	USER	447.30	15.38	5.10	5.9	200sks @15.8# 1.15yield 5.09 gal/sks = 40.9 bbl cmt 24.5bblmwrq
Event 27 Pump Displacement Pump Displacement 8/31/2016 05:02:18 USER 335.30 7.78 5.50 5.0 195.8bbl actuall displacement /bbl	Event	26	Drop Plug	Drop Plug	8/31/2016	05:01:20	USER	2.30	4.29	2.00	0.1	shut down drop plug
Event 28 Cement Returns to Cement Returns to 8/31/2016 05:28:48 USER 850.30 7.76 5.40 149.6 caclulated cmt back	Event	27	Pump Displacement	Pump Displacement	8/31/2016	05:02:18	USER	335.30	7.78	5.50	5.0	
	Event	28	Cement Returns to	Cement Returns to	8/31/2016	05:28:48	USER	850.30	7.76	5.40	149.6	caclulated cmt back to

iCem® Service (v. 4.2.393) Created: Wednesday, August 31, 2016

Customer: WESTERN REFINING SOUTHWEST INC

Job: WESTERN REFINING WWD#2 2STAGE

Case: WWD #2 WESTERN REFINING 2STAGE | SO#: 903512352

		Surface	Surface								surface 103bbl actual cmt back to surface 50 bbl
Event	29	Bump Plug	Bump Plug	8/31/2016	05:41:42	USER	1079.30	7.78	4.00	202.3	calculated psi to bump760psi actuall bump psi
Event	30	Check Floats	Check Floats	8/31/2016	05:44:53	USER	-18.70	7.76	0.00	204.4	check floats floats held 1.5 bbls back
Event	31	End Job	End Job	8/31/2016	05:46:14	COM5					

14.5 lb/gal

Tuned Spacer

1 lbm/bbl 323 lbm/bbl

31.62 gal/bbl

Tuned Spacer III

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 302482		Ship To #: 302482			2	Quote #: 00	Sales Order #: 0903512352				
Customer: W	ESTERN R	EFINING	SOUTI			Customer R					
					lell #: 2			PI/UWI #:		- 7	
Field:	Field: City (SAP): BLOOMFIEL						n Juan	Stat	e: NEW	MEXIC	O
Legal Descrip	tion:				-						
Contractor: A	ZTEC WEI	LL SERV	ICING C	O	Rig/F	Platform Name/No	ım: AZTEC 92	20			
Job BOM: 392	2189										
Well Type: Ol	L & GAS V	VELL									
Sales Person:			M2616		Srvc	Supervisor: Jaco	b Avers				7-
						Job		THE PARTY		2760	
Formation Nan	ne								7 50		
Formation Dep	All Control	Тор				Bottom					_
Form Type						BHST					
Job depth MD		3505ft				Job Depth TVD					
Water Depth						Wk Ht Above Floo					
Perforation De	From				То						
						Well Data					
Description	New	New / Used		ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD	Top TVD	Bottor
Cosina			42 275	40 74E	40			0	ft	ft	ft
Casing Casing			9.625	12.715 8.921	48 36			0	298 3505		
Open Hole Sect	ion		9.023	12.25	30			298	3515		111111111111111111111111111111111111111
Open Hole Geet	ion			12.20				200	0010		
	1 15										d-0.7
				700	Tools	and Accessories		VAN DE LEGIS	(A) (1. 19	HALL D	HOUSE AND
Туре	Size	Qty	Make	Depti			Туре	Size	Q	ty	Make
Guide Shoe	9.625			3505	HEE		Top Plug	9.628	5		HES
Float Shoe	9.625				3386		Bottom Plug	9.625			HES
Float Collar	9.625				1000		SSR plug set	9.625			
Insert Float	9.625				1000		Plug Containe				HES
Stage Tool	9.625				13.5	The state of the state of	Centralizers	9.628	5		HES
	San Park			381000		Fluid Data	SECTION AND	2500			
Stage/Plug #:	1			AL WATER	- Control	i idid Data	THE RESERVE OF THE PARTY OF THE	and the latest the lat	Water Street		The Parket of th
the state of the s	tage Type		Fluid N	Name		Qty Uc	Density ft3	/sack F		nte /mi	Total Mix Fluid Gal

50

bbl

D-AIR 5000, 50 LB SACK (102068797)

BAROID 41 - 50 LB BAG(478095)

FRESH WATER

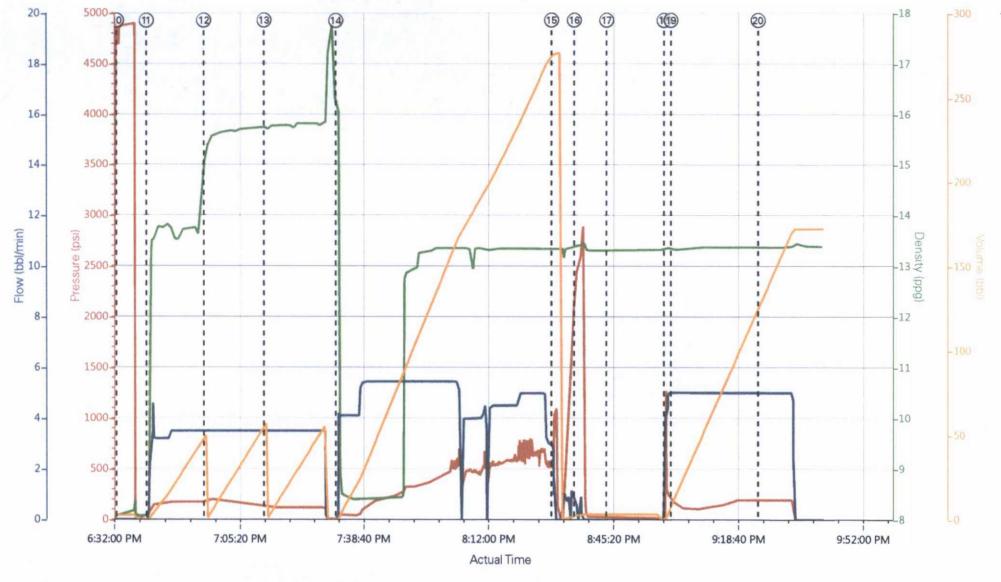
13.8

1.92

Cementing Job Summary

Fluid # Stage Type			Fluid Name	Qty	Qty UoM		Yield ft3/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal			
2	Lead Cemen	t HALO	CEM (TM) SYSTEM	260	sack	15.6	1.2		5	5.11			
5	.11 Gal				FRESH W	ATER							
Fluid #			Fluid Name	Qty	Qty UoM		Yield ft3/sack	Mix Fluid Gal	Rate bbl/mi	Total Mix Fluid Gal			
3	Tail Cement	HALO	CEM (TM) SYSTEM	200	sack	15.6	1.2		5	5.12			
5	.12 Gal				FRESH W	ATER							
Fluid #	Stage Type		Fluid Name	Qty	Qty UoM		Yield ft3/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal			
4	Displacemen	t	Displacement	258.5	bbl	8.33							
Cement	Left In Pipe	Amount	50 ft		Reason				Shoe Join				
				Fluid Dat	2		1000	100		N. 1727			
tage/Plu	g #: 2			i luid Dui	M								
Fluid #	Stage Type		Fluid Name	Qty	Qty UoM		Yield ft3/sack	Mix Fluid	Rate bbl/min	Total Mix Fluid			
1	14.5 lb/gal Tuned Space III		uned Spacer III	50	bbl	13.4	2.17						
31.	62 gal/bbl		FRESH WATER										
1 lbm/bbl			D-AIR 5000, 50 LB SACK (102068797)										
258.	60 lbm/bbl			BAROII	0 41 - 50 LE	BAG(4	78095)						
Fluid #	Stage Type		Fluid Name	Qty	Qty UoM		Yield ft3/sack	Mix Fluid	Rate bbl/min	Total Mix Fluid			
2	Lead Cemen	t EX	TENDACEM (TM) SYSTEM	800	sack	13.2	1.46		5	6.66			
6	.66 Gal				FRESH W	ATER				177			
Fluid #	Stage Type		Fluid Name	Qty	Qty UoM		Yield ft3/sack	Mix Fluid	Rate bbl/min	Total Mix Fluid			
3	Tail Cement	HALO	CEM (TM) SYSTEM	200	sack	15.8	1.15		5	5.09			
5	.09 Gal				FRESH W	ATER							
Fluid #	Stage Type		Fluid Name	Qty	Qty UoM		Yield	Mix	Rate bbl/min	Total Mix Fluid			
4	Displacemen	t	Displacement 192.8 bbl 8.33							Tidia			
		6 000							CARRIE	W. Rayer			
Cement	Left In Pipe	Amount	0 ft	b .	Reason	Tana ar			Shoe Joint				
Charles and	Mix Water:pl		Mix Water Chloride			Mix Wa	ter Temp						
	sulfates:>4		Bump Pressure				Float	s Held	Yes				
omment	ug Bumped?Ye	es	Cement Returns	15bbl 20 bl	bl								

Western Refinery WDW #2



PS Pump Press (psi) -14.7 DH Density (ppg) 13.38 PS Pump Rate (bbl/min) 0 Pump Stg Tot (bbl) 171.9

- 1 Call Out n/a;n/a;n/a;n/a
- 2 Depart Yard Safety Meeting n/a;n/a;n/a;n/a
- 3 Depart from Service Center or Other Site n/a;n/a;n/a;n/a
- Arrive at Location from Other Job or Site n/a;n/a;n/a;n/a
- ⑤ Pre-Rig Up Safety Meeting n/a;n/a;n/a;n/a

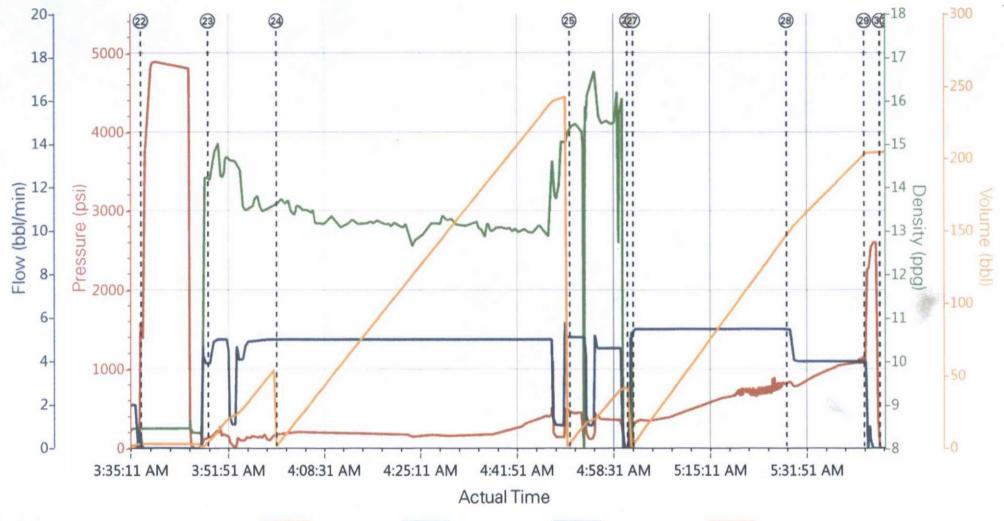
- 6 Pre-Job Safety Meeting -51.7;8.72;0;0
- 7 Start Job-49.7:8.69:0:0
- O otal: 000 4011,0:00,0,
- 8 Start Job-49.7;8.69;0;0
- Pump Spacer -14.7;8.35;0;0
- 10 Pressure Test 4831.3;8.11;0;2 7
- 1 PumpTUNED Spacer 64.3;8.33;1;0.2
- @ Pump 1st Stage Lead Slurry 186.3;15.42:3.5;0 1
- Pump 1st Stage Tail Slurry 1373; 15.69; 3.5; 0.1
- Pump Displacement 10.3;16.11;1.7;0
- (B) Bump Plug 966.3;13.36;0.9;275 9

- 16 Set Packer 2445.3;13.41;0.7;2.8
- Drop Opening Device 21.3;13.31;0;3.2
- Open Multiple Stage Cementer 383.3;13.41
- ® Roll The Cmt OffThe Top 184.3;13.34;5;10.6
- 20 Cement Returns to Surface 202.3;13.36;5;1

m

▲ HALLIBURTON | iCem® Service

Western Refinery WDW #2, 2nd stage



PS Pump Press (psi) DH Density (ppg) PS Pump Rate (bbl/min) Pump Stg Tot (bbl)

- ① Call Out
- 2 Depart Yard Safety Meeting
- 3 Depart from Service Center or Other Site
- Arrive at Location from Other Job or Site
- 5 Pre-Rig Up Safety Meeting
- 6 Pre-Job Safety Meeting

- 7 Start Job
- 8 Pump Spacer
- Pressure Test
- 1 PumpTUNED Spacer
- 1 Pump 1st Stage Lead Slurry
- @ Pump 1st Stage Tail Slurry
- 1 Drop Plug
- (4) Pump Displacement
- 1 Bump Plug
- 6 Set Packer
- 1 Drop Opening Device
- ® Open Multiple Stage Cementer 24 Pump 2nd Stage Lead Slurry
- 19 Roll The Cmt Off The Top
- 20 Cement Returns to Surface
- 21 Start Job
- ZI Otali OOD
- 22 Pressure Test
- 23 Pump Tuned Spacer
- 25 Pump 2nd Stage Tail Slurry 31 End Job
- ramp and onego ten order,
- 26 Drop Plug
- 27 Pump Displacement
- 28 Cement Returns to Surface
- 29 Bump Plug
- 30 Check Floats

▼ HALLIBURTON | iCem® Service

Created: 2016-08-30 05:02:19, Version: 4.2.393

Edit

Customer: WESTERN REFINING SOUTHWEST INC

Representative: JACOB AYERS-112-JE

Job Date: 8/30/2016 3:49:46 PM

Sales Order #: 903512352

Well: WWD#2

COMPANY MAN : LARRY CANDELARIA