



PHOENIX

TECHNOLOGY SERVICES USA INC.

Celebrating 20 Years of Focused Solutions

3610 Elkins Road, Midland, Texas 79705 T. 432.684.0057 F. 432.686.7964 www.phxtech.com

November 12, 2018

Oil Conservation Division
State of New Mexico
811 S. First St.
Artesia, New Mexico 88210

RECEIVED

NOV 26 2018

Dear District 2 - Artesia

DISTRICT II-ARTESIA O.C.D.

Attention: Regulatory Department

Re: Solaris Water Midstream
Mad Cow SWD 1
Eddy County, NM
API #30-015-45204
Job No. 63875

Enclosed please find the Survey Data Certification, and the original Plat and one copy of the Survey Report performed on the above referenced Well by Phoenix Technology Services, Inc. (P-5 No. 664171). Other information required by your office is as follows:

Name & Title of Surveyor	Drain Hole Number	Surveyed Depths		Dates Performed		Type of Survey
		From	To	Start	End	
Andy Askew	1	9,100	10,765	11/11/18	11/11/18	Gyro

A certified plat on which the bottom hole location is oriented both to the surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

Best Regards,

Brittany Carley

Brittany Carley
Operations Administrator

SURVEY CERTIFICATION FORM



PHOENIX
TECHNOLOGY SERVICES

3610 Elkins Road Midland, TX 79705 t:432-684-0057 f: 432-686-7964

Company: Solaris Water Midstream

Job #: 63875

Well Name: Mad Cow SWD 1

County/State: Eddy/ NM

Survey Instrument Type: North Seek Rate Gyro

API # 30-015-45204

Measure Depth (ft)	Vertical Depth (ft)	Inclination (°)	Azimuth (°)	N-S Coordinates	E-W Coordinates	Data Source
8914	8912.07	0.7	298.96	180.35	5.03	MWD

Date	Depth (ft)	Inclination (°)	Azimuth (°)	Date	Depth (ft)	Inclination (°)	Azimuth (°)
11/11/2018	9100	0.51	330.04	11/11/2018	10765	0.58	198.34

Date	Depth (ft)	Inclination (°)	Azimuth (°)	Grid Correction
0	0	0	0	-0.27

Gyro Operator: Phoenix Technology Services USA Ltd.

Gyro Supervisor: Angel Guebara

To the best of my knowledge I certify this survey data to be correct and true

Date: 11/11/18

Print Name: Andy Askew

Signature:



Company:	Solaris Water Midstream
Well:	Mad Cow SWD 1
Location:	Eddy Co., NM
Rig:	Latshaw 21

Job Number:	<u>63875</u>
Grid Corr.:	<u>-0.27</u>
Lat:	<u>32.23</u>
Long:	<u>-103.82</u>

Date: 11-11-18
Calculation Method: Minimum Curvature
Proposed Azimuth: 0
RKB - MSL in feet: 27
Tie Into: MWD

Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
							N/S (ft)	E/W (ft)	Distance (ft)	Angle (deg)			
Enter Tie-In Survey on Line 10					FIELD COPY, NON-DEFINITIVE								
TIE IN	8914	0.70	298.96	0	8912.07	180.35	180.35 N	5.03 E					
Gyro	9100.00	0.51	330.04	186	9098.06	181.62	181.62 N	3.62 E	181.65	1.14	0.20	-0.10	16.71
	9300.00	0.70	346.21	200	9298.05	183.57	183.57 N	2.89 E	183.60	0.90	0.13	0.10	8.08
	9500.00	0.47	267.55	200	9498.04	184.73	184.73 N	1.78 E	184.73	0.55	0.38	-0.12	-39.33
	9700.00	0.61	288.79	200	9698.03	185.03	185.03 N	0.05 W	185.03	359.98	0.12	0.07	10.62
	9900.00	0.29	5.00	200	9898.03	185.88	185.88 N	1.02 W	185.88	359.69	0.30	-0.16	-141.90
	10100.00	0.26	270.21	200	10098.03	186.39	186.39 N	1.42 W	186.39	359.56	0.20	-0.02	132.61
	10300.00	0.65	242.97	200	10298.02	185.87	185.87 N	2.89 W	185.90	359.11	0.22	0.20	-13.62
	10500.00	0.25	172.55	200	10498.01	184.93	184.93 N	3.84 W	184.97	358.81	0.31	-0.20	-35.21
	10700.00	0.32	231.28	200	10698.01	184.14	184.14 N	4.22 W	184.19	358.69	0.14	0.04	29.37
	10765.00	0.58	198.34	65	10763.01	183.72	183.72 N	4.47 W	183.77	358.61	0.55	0.40	-50.68

RECEIVED

AUG 17 2018

DISTRICT I
1110 N. French Dr., El Paso, NM 88501
Phone: (512) 334-4151 Fax: (512) 334-4152

DISTRICT II
111 S. New St., Artesia, NM 88210
Phone: (512) 334-4151 Fax: (512) 334-4152

DISTRICT III
1000 Fox Drive E., Artesia, NM 88210
Phone: (512) 334-4151 Fax: (512) 334-4152

DISTRICT IV
1120 S. D. French Dr., Santa Fe, NM 87505
Phone: (512) 334-4151 Fax: (512) 334-4152

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-102

Revised August 1, 2011

Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-45204	Pool Code 97869	Pool Name SWD; DEVONIAN - SILURIAN
Property Code 322266	Property Name MAD COW SWD	Well Number #1
GRID No. 371643	Operator Name SOLARIS WATER MIDSTREAM, LLC	Elevation 3535'

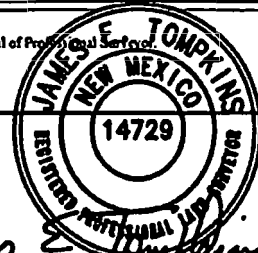
Surface Location

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
1	12	24S	30E		2441'	SOUTH	1135'	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
-	-	-	-	-	-	-	-	-	-
Dedicated Acres 3.67		Joint or Infill	Consolidated Code		Order No.				

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

21	NW CORNER LAT.: 32.2306600°N LON.: -103.8428845°W			16	NE CORNER LAT.: 32.2306728°N LON.: -103.8256352°W	OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or undivided mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Bonnie Atwater</i> 7.31.18 Signature Date Bonnie Atwater Print Name bonnie.atwater@solarmidstream.com E-mail Address solarmidstream.com
11				7		
						SURVEYORS CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. July 20, 2018 Date of Survey Signature and Seal of Professional Surveyor  James E. Tompkins License No.: WTC52626 Draft: M.Y. Certificate Number
11				7		
1413	SW CORNER LAT.: 32.2251689°N LON.: -103.8426122°W			1318	SE CORNER LAT.: 32.2251420°N LON.: -103.8256662°W	

8HL MAD COW SWD #1
GR. ELEV. 3836'
NMSP-E (NAD 83)
N(Y): = 448449.7'
E(X): = 887178.2'
LAT.: = 32.2318593° N
LON.: = 103.8293325° W
NMSP-E (NAD 27)
N(Y): = 448380.7'
E(X): = 833994.2'
LAT.: = 32.2317382° N
LON.: = 103.8288475° W

1135'

2441'

PLAT: C:\USERS\HERNANDEZ\DESKTOP\HTEMP\TEMP WELLS LAYOUT TAB: MAPS

RUP 8-24-18