Form C-141 Page 6

State of New Mexico Oil Conservation Division

Incident ID	NAB1911652112	
District RP	1RP-5444	
Facility ID		
Application ID	pAB1911650160	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

A scaled site and sampling diagram as described in 19.15.29.11 NMAC Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection) Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling) Description of remediation activities I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose at hreat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete. Printed Name: Bob Hall Title: Environmental Manager	Closure Report Attachment Checklist: Each of the following	items must be included in the closure report.						
must be notified 2 days prior to liner inspection) Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling) Description of remediation activities Description of remediation activities Intereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete. Printed Name: Bob Hall	A scaled site and sampling diagram as described in 19.15.29.11 NMAC							
Description of remediation activities	Photographs of the remediated site prior to backfill or photos must be notified 2 days prior to liner inspection)	s of the liner integrity if applicable (Note: appropriate OCD District office						
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report by the OCD does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete. Printed Name: Bob Hall Title: Environmental Manager Bignature: Bob Hall Title: Environmental Manager Date:	Laboratory analyses of final sampling (Note: appropriate OD	C District office must be notified 2 days prior to final sampling)						
and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete. Printed Name: Bob Hall Title: Environmental Manager Signature: Date: 11/26/2019 email: bhall@btaoil.com Telephone: (432) 682-3753 OCD Only Received by: Date: Date: 11/26/2019 Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations. Closure Approved by: Date:	☐ Description of remediation activities							
and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete. Printed Name: Bob Hall Title: Environmental Manager Signature: Date: 11/26/2019 email: bhall@btaoil.com Telephone: (432) 682-3753 OCD Only Received by: Date: D								
Signature: Date:	and regulations all operators are required to report and/or file certa may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and rehuman health or the environment. In addition, OCD acceptance of compliance with any other federal, state, or local laws and/or regularestore, reclaim, and re-vegetate the impacted surface area to the caccordance with 19.15.29.13 NMAC including notification to the operations.	in release notifications and perform corrective actions for releases which fa C-141 report by the OCD does not relieve the operator of liability smediate contamination that pose a threat to groundwater, surface water, a C-141 report does not relieve the operator of responsibility for ations. The responsible party acknowledges they must substantially conditions that existed prior to the release or their final land use in OCD when reclamation and re-vegetation are complete.						
OCD Only Received by: Date: Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations. Closure Approved by: Date:	Printed Name: Bob Hall	Title:Environmental Manager						
OCD Only Received by: Date: Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations. Closure Approved by: Date:	Signature: Bol Hell	Date: _11/26/2019						
Received by: Date: Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations. Closure Approved by: Date:	email: <u>bhall@btaoil.com</u>	Telephone:(432) 682-3753						
Received by: Date: Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations. Closure Approved by: Date:								
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations. Closure Approved by:	OCD Only							
remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations. Closure Approved by:	Received by:	Date:						
	remediate contamination that poses a threat to groundwater, surface	water, human health, or the environment nor does not relieve the responsible						
Printed Name: Title:	Closure Approved by:	Date:						
	Printed Name:	Title:						



Souder, Miller & Associates • 201 S. Halagueno St. • Carlsbad, NM 88220 (575) 689-7040

July 22, 2019

SMA #5E28395, BG4

NMOCD District 1 1625 N. French Drive Hobbs, New Mexico 88240

RE: LINER INSPECTION REPORT STARCASTER 18 FED COM TANK BATTERY (1RP-5444)

To Whom it May Concern:

Souder, Miller & Associates (SMA) is pleased to submit this letter report on behalf of BTA Oil Producers, LLC (BTA) summarizing the liner inspection that occurred due to the Starcaster 18 Fed Com Tank Battery release. The site is located in Section 18, T23S, R34E (N32.31139/W-103.50283) Lea County, New Mexico, on privately-owned land.

Site Characterization

On April 1, 2019, a head switch malfunction resulted in the release of 390 bbls of produced water inside the lined secondary containment of the tank battery. Initial response activities were conducted by the operator and included source elimination and site stabilization, which recovered approximately 390 bbls of produced water. The tanks and containment were then pressure washed and the residual fluid recovered.

Based upon New Mexico Office of the State Engineer (NMOSE) and United States Geological Survey (USGS) well data, depth to groundwater in the area is estimated to be between 170 to 200 feet below grade surface (bgs). There is one water source within ½-mile of the location, according to the NMOSE and USGS online water well databases (Appendix C). The nearest significant watercourse is the Riverine Wetland, located approximately 75 feet to the southeast.

Based on the information presented herein, the applicable NMOCD Closure Criteria for this site is for a groundwater depth of <50 feet bgs.

Liner Integrity

At the request of BTA, SMA conducted a liner integrity inspection per the requirements of 19.15.29.11.A(5)(a) NMAC. NMOCD was notified on July 8, 2019 that the liner inspection was to occur and SMA conducted the inspection on July 11, 2019. After a thorough visual inspection of the liner within the tank battery containment, the liner appeared to be intact and had the ability to contain the leak in question. The tank from which the release occurred was identified, and SMA verified that the release did not occur outside of the lined containment. A photo log and field notes of the inspection is included in Appendix A.

SMA recommends no further action for this release.

5E28395 BG6

Souder, Miller and Associates appreciates the opportunity to provide environmental services to you. If you have any questions or comments concerning this report, please feel free to call Melodie R. Sanjari at 574-370-9782.

Sincerely, Souder, Miller & Associates

Melodie R. Sanjari Project Scientist

M. Janyan

Shawna Chubbuck Senior Scientist

Appendices

Appendix A: Photo Log & Field Notes

Appendix B: C141

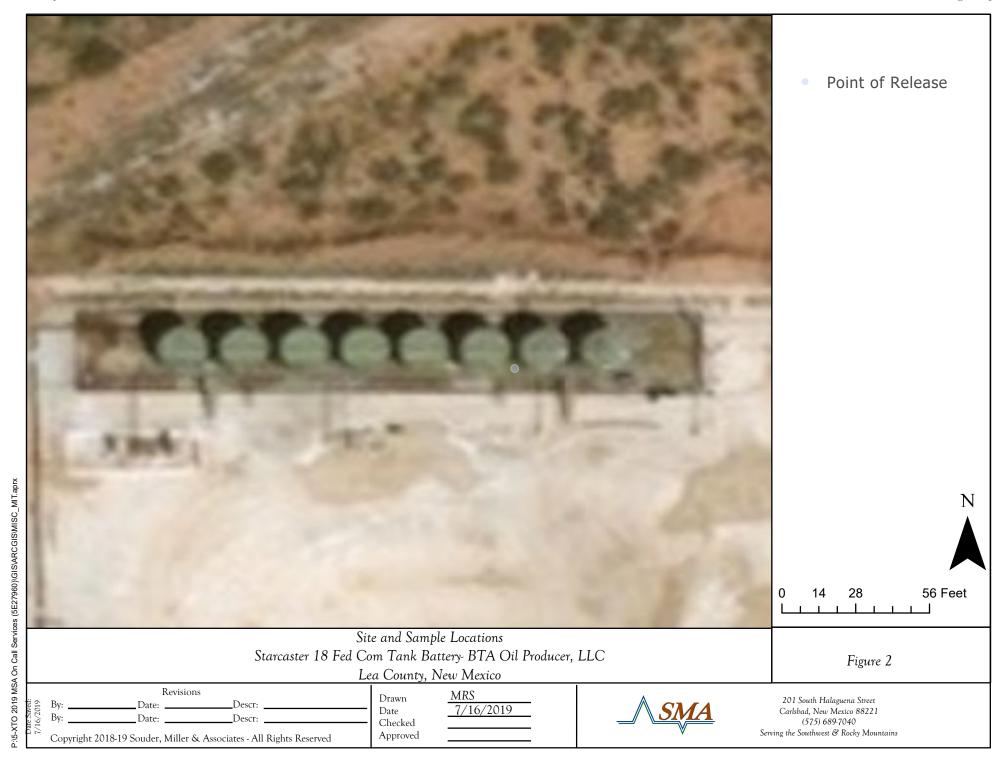
Appendix C: Water Well Data

5E28395 BG6

FIGURES

P:\6-XTO 2019 MSA On Call Services (5E27960)\GIS\ARCGIS\MISC_MIT.aprx
Date Saved:

Copyright 2019 Souder, Miller & Associates - All Rights Reserved



5E28395 BG6

Appendix A PHOTO LOG & FIELD NOTES







ACC 1353-3







Souder, Miller & Associates Liner Inspection Form		\wedge SMA
Project Name: Star Cost	er 18 Fed Inspection Date: 7/11/19	
Client Name: Com 18		7.0
Client Representative(s): Bob H	all	
SMA Inspector(s): MRS 3		4//
Project Location: A 18 23 \$ 34	E Lea Co. Latitude: 32.31139 Longitud	de: <u>-103.5028</u> 3
Inspection Parameters as Outlined	in 19.15.29.11.A(5) NMAC	
PRIOR TO INSPECTION: Two (2) Business Day Notification of Date of Notice:	Inspection to Appropriate Division Office	(Y/N): <u>Y</u>
Material Covering Liner Removed by	Client	(Y/N): <u>Y</u>
Affected Areas Exposed by Client		(Y/N): Y
INSPECTION: Liner Thoroughly Inspected for Dama	nge	(Y/N): _Y
All Damaged Areas Observed Marked		(1/11)
To Be Completed by Client Represe Can Responsible Party Demonstrate: Liner Integrity Was Maintaine Release Was Contained to Lin Liner Was Able to Contain the	d (per SMA Inspection) ed Containment Area	(Y/N): <u>Y</u> (Y/N): <u>Y</u> (Y/N): <u>Y</u>
If YES : Certify on Form C-141	That Liner Remains Intact	(2///):
Depending on R See Table 1 19	t Delineate Horizontal & Vertical Extent Release: .15.29.12 NMAC aph (e) Paragraph (5) of Subsection A 19.15.29.11 NM	IAC
Additional Comments:	notes.	
SMA INSPECTOR SIGNATURE	CLIENT RE	PRESENTATIVE
Date:	Date:	

5E28395 BG6

APPENDIX B C141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	NAB1911652112
District RP	1RP-5444
Facility ID	
Application ID	pAB1911650160

Release Notification

Responsible Party

Responsible Party: BTA Oil Producers, LLC	OGRID: 260297
Contact Name: Bob Hall	Contact Telephone: 432-682-3753
Contact email: bhall@btaoil.com	Incident # (assigned by OCD) NAB1911652112
Contact mailing address: 104 S. Pecos St., Midland, TX 79701	

Location of Release Source

Latitude: 32.31139° Longitude: -103.50283°

(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Starcaster 18 Fed Com Tank Battery	Site Type: Tank Battery						
Date Release Discovered: 4/1/2019	API# (if applicable) Nearest well: Starcaster 18 Fed Com #004 API #30-025-42025						

Unit Letter	Section	Township	Range	County
Α	18	23S	34E	Lea

Surface Owner:	☐ State	☐ Federal ☐	Tribal	Private (Name:	Limestone Basin	Prop Ranch LLC.	18 Desta Dr.	Midland,	TX 79705)
Durrace O Willer.] IIIOWI	~ 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		P	,		,

Nature and Volume of Release

	Tratule and Volume of I	Release
Materia	al(s) Released (Select all that apply and attach calculations or specific	justification for the volumes provided below)
Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
Produced Water	Volume Released (bbls) 390 BBL (Based on volume recovered from lined containment.)	Volume Recovered (bbls) 390 BBL – Lined containment.
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
Cause of Release		
A head switch malfu	nction failed to stop the flow of water into the	e water tanks. The tanks overflowed 390 BBL
of produced water in	nto the lined containment of the tank battery.	The produced water was completely
recovered with a vac	cuum truck from the lined containment.	

Form C-141 Page 2

State of New Mexico Oil Conservation Division

Incident ID	NAB1911652112
District RP	1RP-5444
Facility ID	
Application ID	pAB1911650160

release as defined by	f YES, for what reason(s) does the responsible party consider this a major release?
	IMOCD Rules define a release greater than 25 BBL as a major release.
Xes □ No	
	ce given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? ion of the release via email today. This C-141 Form is being sent as immediate notice of
	Initial Response
The responsible part	ty must undertake the following actions immediately unless they could create a safety hazard that would result in injury
☐ The source of the release	e has been stopped.
The impacted area has b	een secured to protect human health and the environment.
	been contained via the use of berms or dikes, absorbent pads, or other containment devices.
All free liquids and reco	verable materials have been removed and managed appropriately.
If all the actions described a	bove have <u>not</u> been undertaken, explain why:
has begun, please attach a n	C the responsible party may commence remediation immediately after discovery of a release. If remediation harrative of actions to date. If remedial efforts have been successfully completed or if the release occurred area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
regulations all operators are req public health or the environmer failed to adequately investigate	ation given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and juired to report and/or file certain release notifications and perform corrective actions for releases which may endanger at. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws
Printed Name: Bob Hall	Title: Environmental Manager
Signature: Bolt	Date: 4/2/2019
email: bhall@btaoil.com	Telephone: 432-682-3753
OCD Only Received by:	Date: 4/26/2019

5E28395 BG6

APPENDIX C WATER WELL DATA



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is

closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

		POD Sub-		0	Q	o								,	Water
POD Number	Code		County	_	_	_	Sec	Tws	Rng	X	Y	DistanceDe	pthWellDep		
<u>CP 00556 POD1</u>		CP	LE	4	4	3	08	23S	34E	641762	3576206	862	497	255	242
CP 00872 POD1		CP	LE	1	1	1	08	23S	34E	641225	3577504*	1593	494	305	189
<u>CP 01075 POD1</u>		CP	LE	1	1	1	08	23S	34E	641278	3577525 🌑	1624	430	20	410
<u>CP 01130 POD2</u>		CP	LE	2	1	2	07	23S	34E	640674	3577549	1635	27		
<u>CP 01130 POD1</u>		CP	LE	2	1	2	07	23S	34E	640662	3577558	1646	27		
CP 01502 POD1		CP	LE	4	3	3	05	23S	34E	641316	3577635	1739	648	200	448
CP 01502 POD2		CP	LE	4	3	3	05	23S	34E	642074	3577676	2075	680	300	380
CP 01730 POD1		CP	LE	2	2	1	16	23S	34E	643549	3575824	2608	594	200	394

Average Depth to Water:

213 feet

Minimum Depth:

20 feet

Maximum Depth:

305 feet

Record Count: 8

UTMNAD83 Radius Search (in meters):

Easting (X): 640943 **Northing (Y):** 3575936

Radius: 3000

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

7/16/19 1:30 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER

^{*}UTM location was derived from PLSS - see Help



USGS Home Contact USGS Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category:	Geographic Area:	Geographic Area:	
Groundwater	✓ United States	~	GO

Click to hideNews Bulletins

- Introducing The Next Generation of USGS Water Data for the Nation
- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

• 321901103185101

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

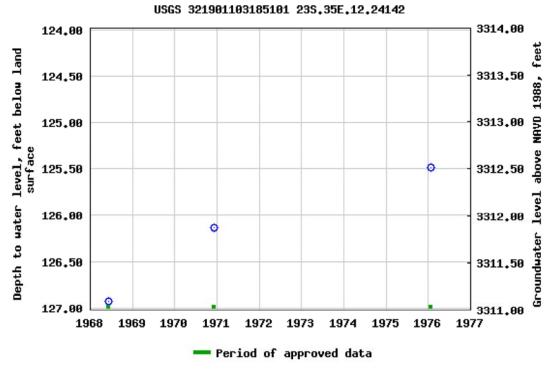
USGS 321901103185101 23S.35E.12.24142

Available data for this site Groundwater: Field measurements

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°19'01", Longitude 103°18'51" NAD27
Land-surface elevation 3,438 feet above NAVD88
The depth of the well is 140 feet below land surface.
This well is completed in the Chinle Formation (231CHNL) local aquifer.

Output formats

Table of data	
Tab-separated data	
Graph of data	
Reselect period	



Breaks in the plot represent a gap of at least one year between field measurements.

Download a presentation-quality graph

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

Accessibility

Plug-Ins

FOIA

Privacy

Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey

Title: Groundwater for USA: Water Levels

URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: <u>USGS Water Data Support Team</u>

Page Last Modified: 2019-07-16 15:35:21 EDT

1.02 0.93 nadww01





USGS Home Contact USGS Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category:	Geographic Area:	Geographic Area:	
Groundwater	✓ United States	~	GO

Click to hideNews Bulletins

- Introducing The Next Generation of USGS Water Data for the Nation
- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

• 321629103193501

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 321629103193501 23S.35E.25.312

Available data for this site Groundwater: Field measurements GO

Lea County, New Mexico

Hydrologic Unit Code 13070007

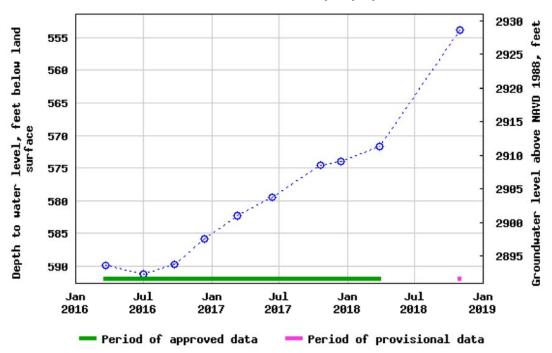
Latitude 32°16'29.2", Longitude 103°19'35.3" NAD83

Land-surface elevation 3,483 feet above NAVD88

Output formats

Table of data	
Tab-separated data	
Graph of data	
Reselect period	





Breaks in the plot represent a gap of at least one year between field measurements.

Download a presentation-quality graph

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

Accessibility

Plug-Ins

FOIA

Privacy

Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey

Title: Groundwater for USA: Water Levels

URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: <u>USGS Water Data Support Team</u>

Page Last Modified: 2019-07-16 15:36:42 EDT

1.06 0.97 nadww01

