

PLUGGING RECORD

Operator Formerly Copper Eagle Gas Storage, LLC		Address & Phone number Not Applicable	
Federal, State, or Indian Lease No. or lessor's name if fee lease Not Applicable		Well No. 1-19	Field & Reservoir Luke Field
Location of Well Cadastral Location: B (2-1) 19 AAB		Sec - Twp - Rge County Maricopa	
Application to drill this well was filed in name of Copper Eagle Gas Storage, LLC		Has this well ever produced oil or gas? No	Character of well at completion (initial production) Oil (bbls/day) Not Applicable Gas (MCF/day) Not Applicable Dry?
Date plugged May 7, 2018	Total depth 2,100 feet	Amount well producing when plugged: Oil (bbls/day) Not Applicable Gas (MCF/day) Not Applicable Water (bbls/day)	
Name of each formation containing oil or gas. Indicate which formation open to wellbore at time of plugging	Fluid content of each formation	Depth interval of each formation	Size, kind & depth of plugs used. Indicate zones squeeze cemented, giving amount of cement
Not Applicable			

CASING RECORD

Size pipe	Put in well (ft.)	Pulled out (ft.)	Left in well (ft.)	Give depth and method of parting casing (shot, etc.)	Packers and shoes
20"	60'	10'	50'		
13 3/8"	2,000'		1,990'		
9 5/8"	5,650'		5,540'		

Was well filled with heavy drilling mud, according to regulations?
Well was cemented from 10' to 2,100 feet

Indicate deepest formation containing fresh water

NAME AND ADDRESSES OF ADJACENT LEASE OPERATORS OR OWNERS OF THE SURFACE

Name	Address	Direction from this well
None		

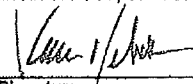
In addition to other information required on this form, if this well was plugged back for use as a fresh water well, give all pertinent details of plugging operations to base of fresh water sand, perforated interval to fresh water sand, name and address of surface owner, and attach letter from surface owner authorizing completion of this well as a water well and agreeing to assume full liability for any subsequent plugging which might be required.

Not Applicable

Use reverse side for additional detail

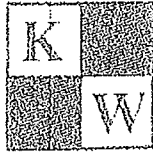
CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Project Hydrogeologist of the Southwest Groundwater Consultants (company) and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

5-16-18
Date


Signature

Mail one copy of completed form to:
Oil and Gas Program Administrator
Arizona Department of Environmental Quality
1110 W. Washington Street
Phoenix, AZ 85007
Permit No. _____ email one copy to: ogcc@azdeq.gov

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Plugging Record
File two copies: one by mail, one electronically
Form No. 10



K - WEST SURVEYING, INC.
P.O. BOX 509
AVONDALE, AZ 85323

PHONE: 623-536-8248
FAX: 623-536-8247
CELL: 602-320-2333
E-MAIL: kwestsurvey@cox.net

April 05, 2018

Southwest Groundwater Consultants

Attn.: Kevin Hebert

Re: Monitoring Well # 1-19
South side Camelback Rd. and West of
Reems Rd. (alignment North)

The following is Arizona State Plane coordinates of monitoring well #1-19, lying within the NE.1/4, Sec. 19, T.-2N., R-1W. of the G. & S.R.B. & M., Maricopa County, Arizona:

N. 912398.015 E. 553876.879

Basis of Coordinates (NAD83 DATUM):
Points #30671-1 & #30672-1, PLSS SUBDIVISION RECORD OF SURVEY GDACS,
Recorded in Book 688 of Maps, Page 40, records of Maricopa County, Arizona.

Any questions regarding this matter, please contact K-West Surveying at the above information.

Wade H. Shaffer R.L.S.
vice-president

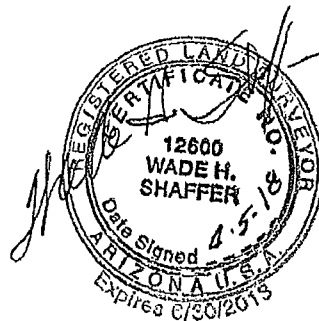


EXHIBIT A

INJECTION WELL I-19

A PORTION OF THE NORTHEAST QUARTER OF SECTION 19, TOWNSHIP 2 NORTH, RANGE 1 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT FROM WHICH THE NORTHEAST CORNER OF SAID SECTION 19 BEARS NORTH 00°03' 07" EAST, A DISTANCE OF 320.00 FEET AND SOUTH 89°56' 53" EAST, A DISTANCE OF 1099.47 FEET; THENCE SOUTH 00°03' 07" WEST, A DISTANCE OF 120.00 FEET; THENCE NORTH 89°56' 53" WEST, A DISTANCE OF 60.00 FEET; THENCE NORTH 00°03' 07" EAST, A DISTANCE OF 120.00 FEET; THENCE SOUTH 89°56' 53" EAST, A DISTANCE OF 60.00 FEET TO THE POINT OF BEGINNING.

SAID PARCEL CONTAINS 7,200 SQUARE FEET OR 0.165 ACRES, MORE OR LESS.



Douglas A. Ducey
Governor

State of Arizona
Oil and Gas Conservation Commission

1110 W. Washington Street, Phoenix, AZ 85007
602-771-4501
www.azogcc.az.gov

Dennis L. Turner, Oil and Gas Administrator

Commissioners:
Frank Thorwald, Chair
J. Dale Nations, Ph.D., Vice Chair
Stephen R. Cooper
William C. Feyerabend

VIA EMAIL and US MAIL

August 17, 2018

Mr. Bob Bambauer
Senior Vice President
Sunbelt Holdings
6720 North Scottsdale Road, Suite 250
Scottsdale, AZ 85253-4424

**RE: Notice of Arizona Oil & Gas Conservation Commission Ruling, Meeting of July 13, 2018:
Requirement to record GPS coordinates of the Copper Eagle #1-19 (permit 911) well with the Maricopa County Reorder**

Dear Mr. Bambauer:

Determination by the Commission

At the properly noticed Arizona Oil & Gas Conservation Commission (AOGCC) meeting on July 13, 2018, the Commission addressed the matter of recording the GPS coordinates of the subsurface marker for the Copper Eagle #1-19 well (permit 911), which was plugged and abandoned on May 7, 2018.

After discussion of the item, the AOGCC voted to require SunBelt Holdings to record the cover plate location of the wellhead with the Maricopa County Recorder. According to the "SunCor 1-19 Abandonment Report," the top of the wellhead is approximately ten feet below ground surface.

SunBelt Holdings shall provide the Maricopa County Recorder's office with a copy of the final plugging report, dated May 16, 2018 and shall record with the County the GPS coordinates of the subsurface location of the wellhead.

This task should be completed on or before November 30, 2018. Please contact the undersigned if you believe more time is necessary.

Please direct any questions and address all correspondence to:

Dennis L. Turner
Oil & Gas Administrator
Arizona Oil & Gas Conservation Commission
c/o Arizona Department of Environmental Quality
1110 W. Washington Street
Phoenix, AZ 85007
ogcc@azdeq.gov

Sincerely,

Dennis L. Turner
Oil & Gas Program Administrator

cc: Frank Thorwald, Chairman, Arizona Oil and Gas Conservation Commission (email only)
Kevin Hebert, Southwest Groundwater Consultants

May 16, 2018

Mr. Bob Bambauer
Senior Vice President
Sunbelt Holdings
6720 North Scottsdale Road, Suite 250
Scottsdale, Arizona 85253

**SUBJECT: WELL ABANDONMENT – SUNCOR 1-19 OIL & GAS STORAGE WELL,
GOODYEAR, AZ**

Dear Mr. Bambauer:

Southwest Groundwater Consultants (SGC) has prepared the following report documenting the abandonment of the SunCor 1-19 Oil & Gas Storage Well located south of Camelback Road, approximately 1/4 mile east of Alsup Avenue in Goodyear, Arizona. The location of the well is shown in Figure 1 included as Attachment 1.

BACKGROUND INFORMATION

Information regarding 1-19 Oil & Gas well is presented below.

	SunCor 1-19
Cadastral Well Location	B (2-1) 19 AAB
Date Installed	July 2002
Total Depth (feet)	8,307

Abandonment Application

SGC prepared a well abandonment application and submitted it to the Oil & Gas Conservation Commission for approval. Final approval was granted by the Oil & Gas Conservation Commission in a letter dated March 8, 2018. A copy of the “Application to Plug and Abandon” and the subsequent approval letter are included as Attachment 2.

Abandonment Procedures

Southwest Waterworks Contractors, Inc. (Southwest Waterworks) was contracted to abandon the well. Southwest Waterworks contracted Longmire Well Service (Longmire) to conduct a downhole color video survey of the well on March 27, 2018 to confirm the well casing was open to a depth of at least 2,100 feet below land surface (bls). As shown in the video, the well casing was observed to be open below 2,106 feet bls. The well casing was observed to be in good condition and the water surface in the well was observed at 2 feet bls. A copy of the well video on CD is included as Attachment 3.



Longmire was also contracted to install a steel bridge plug in Well 1-19 at a depth of 2,100 feet bls. Longmire installed a custom made corrugated steel plug that had a diameter slightly less than the existing 9 5/8-inch diameter well casing. The plug was swaged in place on April 13, 2018. Photographs of the bridge plug are included in Attachment 4.

Although a cement bond log had previously been conducted on the 1-19 well on August 5, 2002 by Schlumberger, it was determined the log only pertained to the cased portion of the well below 2,106 feet. In order to confirm no annular space was “open” to the surface behind the well casing, SGC contracted Geolog, LLC (Geolog) to perform a cement bond log from the depth of 2,100 feet bls to the ground surface. Geolog conducted a cement bond log of well 1-19 on April 18, 2018. The cement bond log performed by Geolog confirmed the annular space behind the casing was cemented. A copy of the cement bond log conducted by Geolog is included as Attachment 5.

Well 1-19 well was abandoned by filling with a cement bentonite slurry in two lifts by pumping through a tremie pipe. Prior to pumping the cement grout through the tremie pipe, the cement grout was passed through a 2-inch slotted bar strainer, in order to remove any unmixed lumps. Approximately 10 cubic yards of cement bentonite slurry were placed during the initial lift on May 2, 2018 followed by a second lift of approximately 23 cubic yards on May 7, 2018. The second lift brought the cement in the well to within approximately 10 feet of ground surface.

Final abandonment activities included removing the upper 10 feet of well casing materials; placing a permanent steel plate with the well name permanently engraved over the remaining casing materials; placing a granular material infused with a bright colored permanent dye; and backfilling the remaining portion of the excavation with clean imported fill material. The fill material was compacted using a hand operated vibrating compactor, bucket tamping, and wheel rolling. A sign post, with pertinent well information, was placed at the abandoned well location; although it is understood the need for a permanent marker post was waived by the Oil & Gas Conservation Commission and this sign may be removed pending future development of the property. Photographs documenting the abandonment procedures are included as Attachment 4.

The well location was previously surveyed by an Arizona Licensed surveyor. A copy of the survey information is included as Attachment 6. A completed “Plugging Record” was prepared for the abandonment and is included as Attachment 7.



Mr. Bob Bambauer
SunCor 1-19 Abandonment Report
May 16, 2018
Page 3 of 3

If you have any questions or require additional information, please call.

Sincerely,

Southwest Groundwater Consultants

A handwritten signature in blue ink, appearing to read 'Kevin D. Hebert', with a long horizontal flourish extending to the right.

Kevin D. Hebert, R.G.
Senior Project Hydrogeologist

Attachments: Attachment 1: Figure 1
Attachment 2: Application to Plug an Abandon
Attachment 3: Well Video
Attachment 4: Abandonment Photographs
Attachment 5: Cement Bond Log
Attachment 6: Well Coordinate Survey
Attachment 7: Plugging Record



Mr. Bob Bambauer
SunCor 1-19 Abandonment Report
May 16, 2018

ATTACHMENT 1

FIGURE 1



WELL LOCATION MAP SUNCOR 1-19 OIL & GAS WELL



Mr. Bob Bambauer
SunCor 1-19 Abandonment Report
May 16, 2018

ATTACHMENT 2

APPLICATION TO PLUG AND ABANDON



Douglas A. Ducey
Governor

State of Arizona
Oil and Gas Conservation Commission

1110 W. Washington Street, Phoenix, AZ 85007

602-771-4501

www.azogcc.az.gov

Dennis L. Turner, Oil and Gas Administrator

Commissioners:
Frank Thorwald, Chair
Vice Chair, vacant
Stephen R. Cooper
William C. Feyerabend
J. Dale Nations, Ph.D.

VIA EMAIL and US MAIL

March 8, 2018

Mr. Bob Bambauer
Senior Vice President
Sunbelt Holdings
6720 North Scottsdale Road, Suite 250
Scottsdale, AZ 85253-4424

RE: Arizona Oil and Gas Conservation Commission Reconsideration of Approval of the Sunbelt Holdings Plug and Abandonment of the Copper Eagle #1-19 (permit 911) and Copper Eagle #1-24 (permit 909) Wells at the Meeting of January 12, 2018

Dear Mr. Bambauer:

As you may recall, the Arizona Oil and Gas Conservation Commission (OGCC or Commission) approved the plug and abandonment process for Sunbelt Holdings (Sunbelt) for wells Copper Eagle #1-19 (permit 911) and Copper Eagle #1-24 (permit 909) in the meeting of January 12, 2018. Sunbelt requested modification of the Commission's ruling and clarification of the Dennis Turner follow up letter of January 31, 2018. The Commission properly noticed the Sunbelt request for modification of the previous order, which was brought forward at the Commission meeting of February 23, 2018.

The Commission again appreciates your time and input at the public meeting on February 23, 2018 to reconsider two of the Commission's eleven directives as approved in the January 12, 2018 meeting. The directives were described in my letter of January 31, 2018.

At the February 23, 2018 meeting, the OGCC voted to amend two of the directives that were reflected in my previous letter. The two directives are modified as follows:

2. Sunbelt Holdings shall install a permanent bridge plug at the approximate top of the salt body in each well. At Sunbelt's discretion, the bridge plug may be either cast iron or steel. The Commission recommended the bridge plug be placed at a minimum depth of 2100 feet in both wells.
3. In each well, below the permanent bridge plug, the borehole may remain filled with brine or water (its current state), instead of filling it with plugging mud, as required by Arizona Administrative Code (A.A.C.) R12-7-127(D).

Other than the two directives as modified above, the remaining directives are unchanged. In placing the permanent bridge plug, Sunbelt shall fill the entire wellbore with plugging cement to the surface. The preferred plugging cement slurry is that recommended by the American Petroleum Institute (API) Environmental Guidance Document: Well Abandonment and Inactive Well Practices for U.S. Exploration and Production Operations, i.e., a neat cement slurry mixed to API standards. The plugging cement slurry shall be allowed to cure for the times specified by API before proceeding with excavation work.

In the February 23, 2018 meeting, the OGCC also discussed the absence of any data verifying casing integrity and cement bonding in the 1-24 well. During this meeting, Sunbelt agreed to confer with Schlumberger, the logging company who originally ran the logs in both wells, to determine the best way to evaluate whether the cement bond and casing integrity are adequate for plugging the 1-24. Sunbelt agreed to provide the Commission with the results of that discussion with Schlumberger. The first directive of the Commission, as contained in my January 31, 2018 letter, remains unchanged; the Commission expects assurance from the operator that the 1-19 wellbore is isolated from the formations it penetrated above the Luke salt deposit.

Enclosed is your copy of the approved Application to Plug and Abandon the 1-19 well. Please advise me via email (preferred) or phone at least 48 hours in advance of the work commencing on this well. When the plugging work is completed on this well, in accordance with R12-7-127(I), submit a completed Form 10 within 15 days. Download this form at <http://www.azogcc.az.gov/forms> . Forms 9 and 10 should be submitted both electronically and via US Mail.

Please direct any questions and address all correspondence to:

Dennis L. Turner
Oil & Gas Administrator
Arizona Oil & Gas Conservation Commission
c/o Arizona Department of Environmental Quality
1110 W. Washington Street
Phoenix, AZ 85007
ogcc@azdeq.gov

Sincerely,



Dennis L. Turner
Oil & Gas Program Administrator

cc: Frank Thorwald, Chairman, Arizona Oil and Gas Conservation Commission (email only)
Kevin Hebert, Southwest Groundwater Consultants

CTS: 376207

APPLICATION TO PLUG AND ABANDON

ADEQ AIR QUALITY DIVISION

18 FEB 27 PM 1:12

FIELD Luke - Goodyear, Arizona
OPERATOR Formerly SunCor ADDRESS & PHONE N/A
LEASE NUMBER (Lessor's name if fee) N/A WELL NO. SunCor 1-19
LOCATION Cadastral Well Location - B(2-1) 19 AAB

TYPE OF WELL Oil and Gas Storage Well TOTAL DEPTH 8,307 ft
(Oil, Gas, or Dry)

ALLOWABLE (If Assigned) N/A
LAST PRODUCTION TEST OIL N/A (Bbls.) WATER N/A (Bbls.)
GAS N/A (MCF) DATE OF TEST N/A
PRODUCING HORIZON N/A PRODUCING FROM N/A TO N/A

1. COMPLETE CASING RECORD:

- Conductor Pipe (0 ft to 60 ft)
- 20" x 0.375" Wall Grade B Line Pipe
• Surface Casing (0 ft to 2,000 ft)
- 13 3/8" 68.00 #/ft K-55, HC, ERW, BTC (New, API, Prime)
• Production Casing (0 ft to 5,650 ft)
- 9 5/8" 43.5 #/ft HC P-110 LTC (New, API, Prime)

2. FULL DETAILS OF PROPOSED PLAN OF WORK:

See Attachment A

DATE COMMENCING OPERATIONS March 2018

NAME OF PERSON DOING WORK Southwest Waterworks Contractors, Inc. ADDRESS 2205 W. Grant Street, Phoenix, AZ 85005

Signature [Handwritten Signature]

Title SENIOR PROJECT HYDROGEOLOGIST

Address 3033 N. 44th Street, Ste. 120, PHOENIX, AZ 85018

Date 2/26/18

Mail two copies of completed form to:
Oil and Gas Program Administrator
Arizona Department of Environmental Quality
1110 W. Washington Street
Phoenix, AZ 85007

Date Approved 3/8/2018
STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
By DL Turner

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Application to Plug and Abandon
File Two copies
Form No. 9

Permit No. 911

ATTACHMENT A

Details of Proposed Plan of Work

Details of Proposed Plan of Work for 1-19 Abandonment

1. Install a steel bridge plug, swaged in place to a depth of 2,100 feet below land surface (bls).
2. Fill the entire cased interval from above the steel bridge plug to within 10-feet bls with a cement slurry mixed to American Petroleum Institute (API) Standards.
3. Remove the upper 10-feet of all well casing materials and surface structures at the well site.
 - 3.1. Install a metal plate over all casing tubulars at well site.
 - 3.2. In accordance with A.A.C. R12-7-106(A), permanently inscribe the well location and identification on the well plate.
4. Backfill the next three to five-feet of the excavation at the well with a granular material infused with a permanent, highly visible dye.
5. Backfill the remaining excavation above the dyed granular material with clean imported fill and compact using wheel and bucket tamping.
6. No permanent above-ground well marker will be installed due to A.A.C. R12-7-127(F) being waived. Ground surface will be returned to current condition.
7. The well location will be surveyed using geodetic coordinates by an Arizona licensed professional surveyor.
8. After completion of work, a temporary marker will be placed above ground at the well location. The marker will be the same or similar to the marker currently on site.
9. All closure steps will be photo-documented to confirm completion of the plug and abandonment of the well as per all applicable statutes and rules.



Mr. Bob Bambauer
SunCor 1-19 Abandonment Report
May 16, 2018

ATTACHMENT 3

**WELL VIDEO
(ON CD)**



Mr. Bob Bambauer
SunCor 1-19 Abandonment Report
May 16, 2018

ATTACHMENT 4

ABANDONMENT PHOTOGRAPHS



View of bridge plug and swage tool



View of bridge plug



View of Longmire rig



View of bridge plug



Pumping cement bentonite slurry into 1-19 well



Site excavation to expose 1-19 well casing



View of excavation with upper casing removed



View of steel well marker



View of well marker with dyed material



View of temporary sign post



View of final site completion



Mr. Bob Bambauer
SunCor 1-19 Abandonment Report
May 16, 2018

ATTACHMENT 5

CEMENT BOND LOG

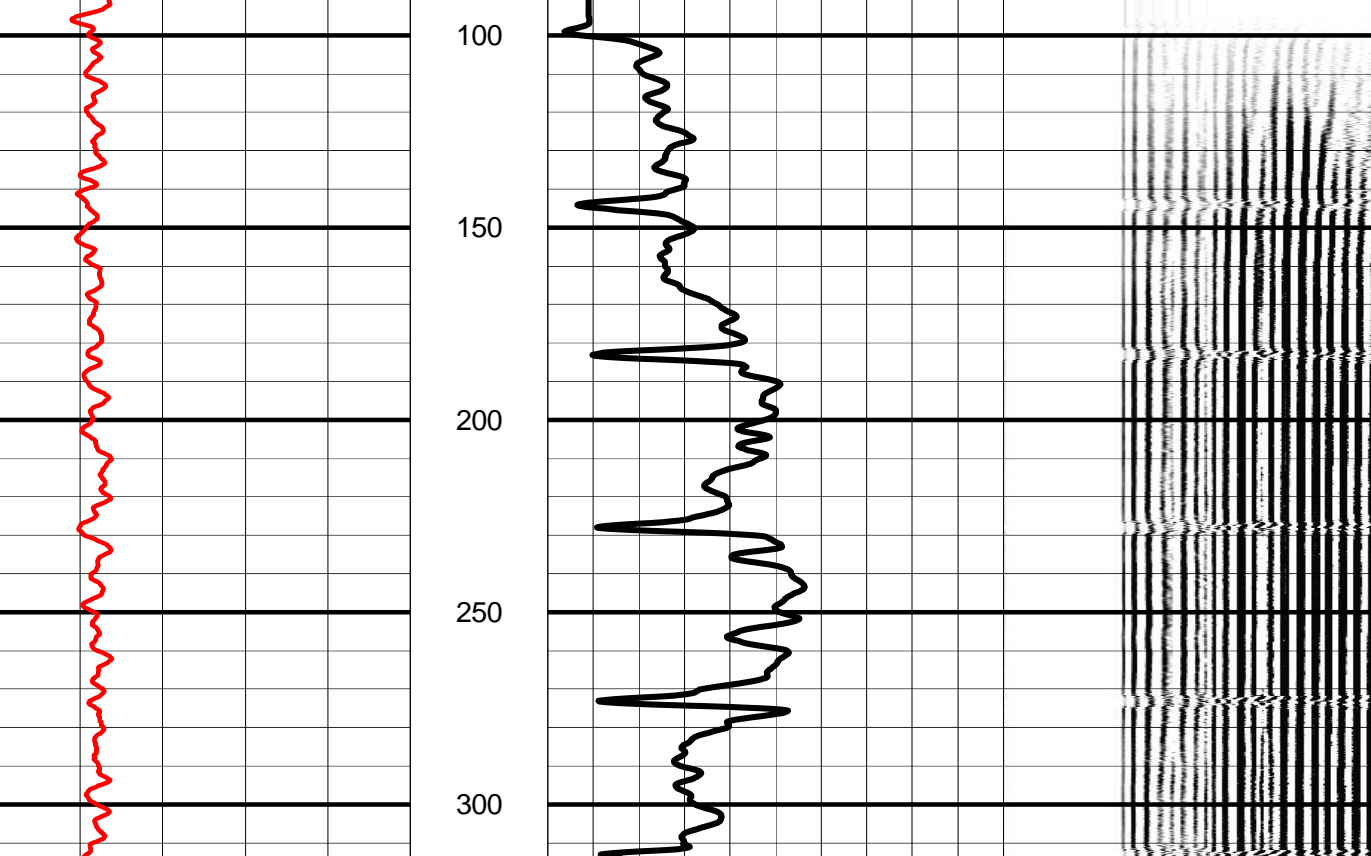
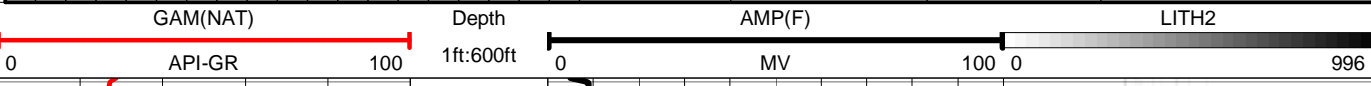


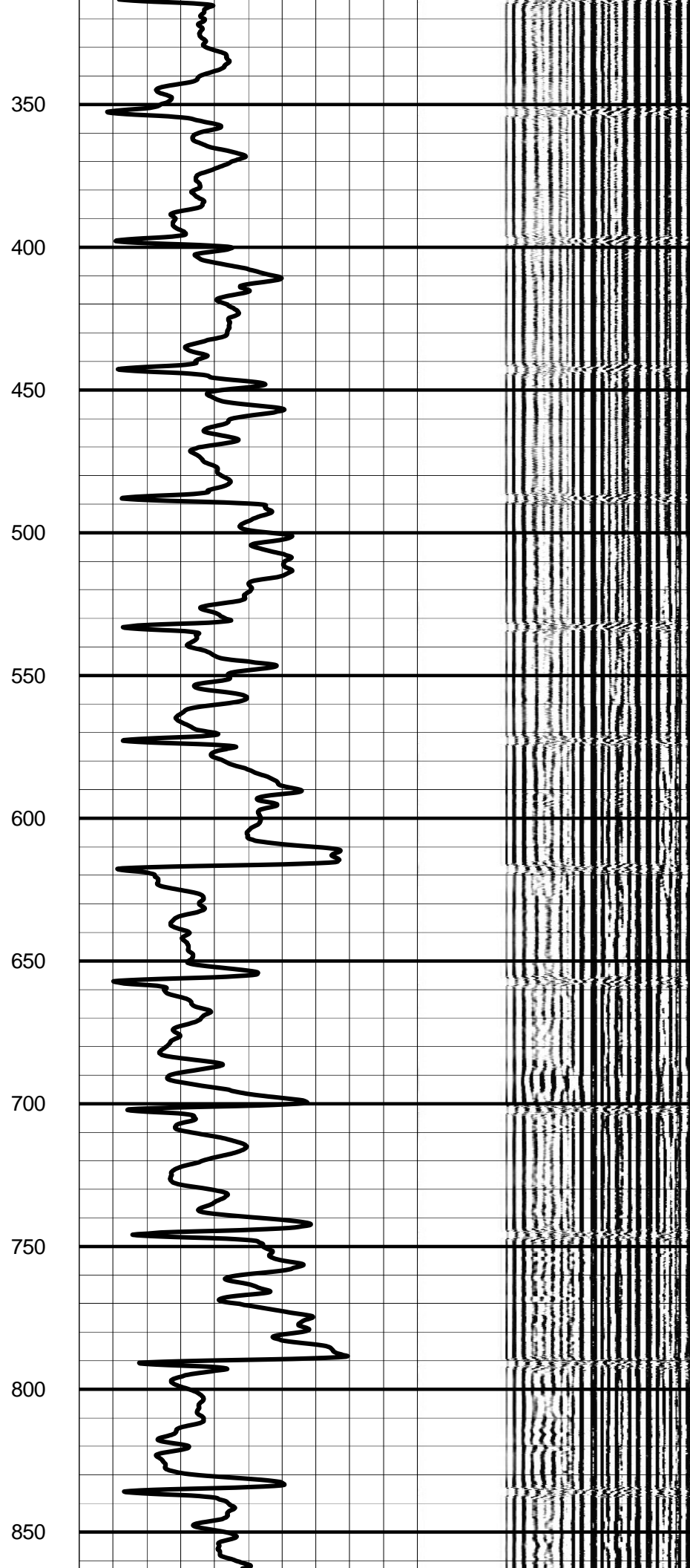
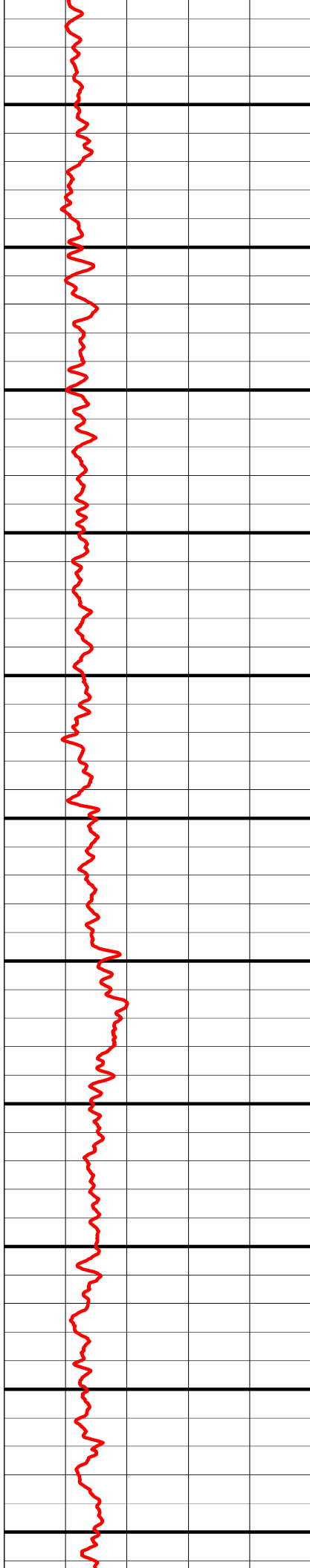
Geolog, LLC
 P.O. Box 2571 Cottonwood AZ. 86326
 (928) 899-6491
 geologllc@gmail.com

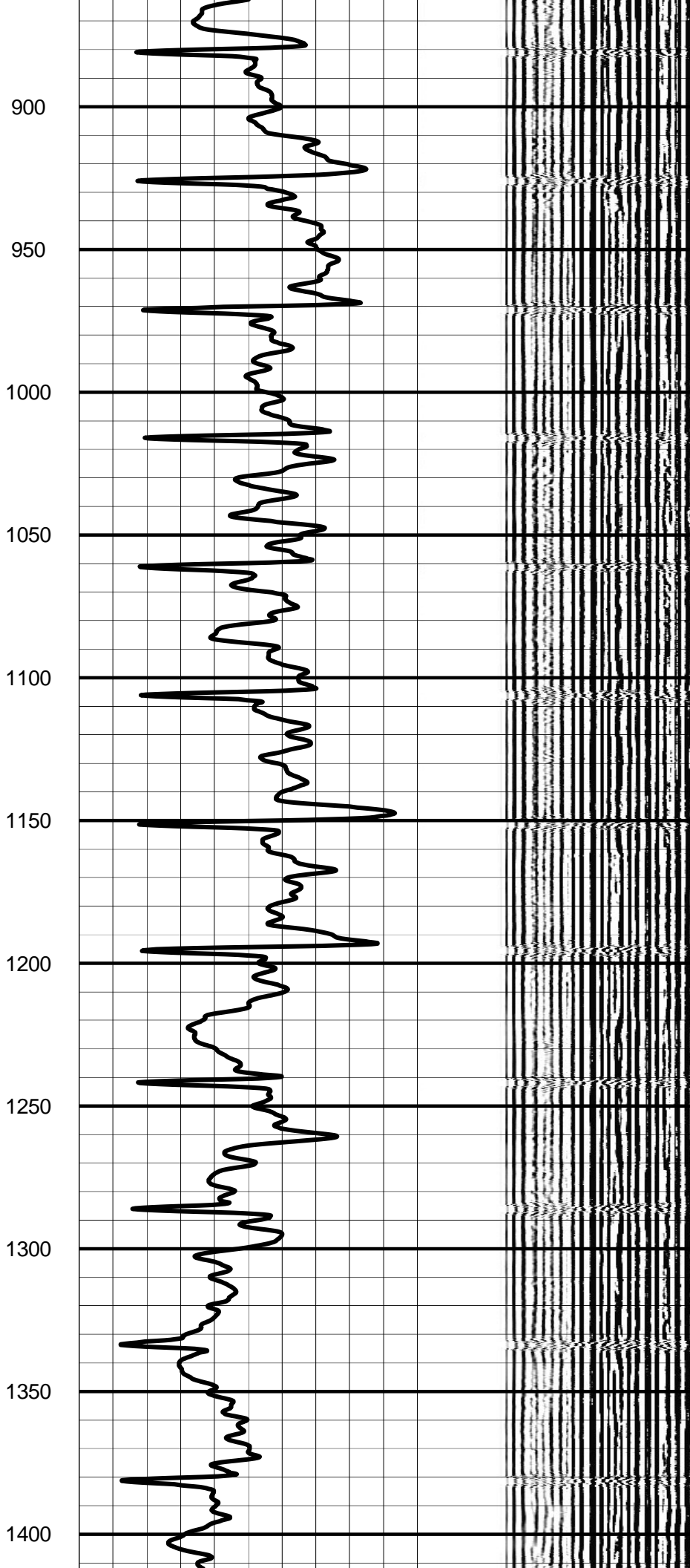
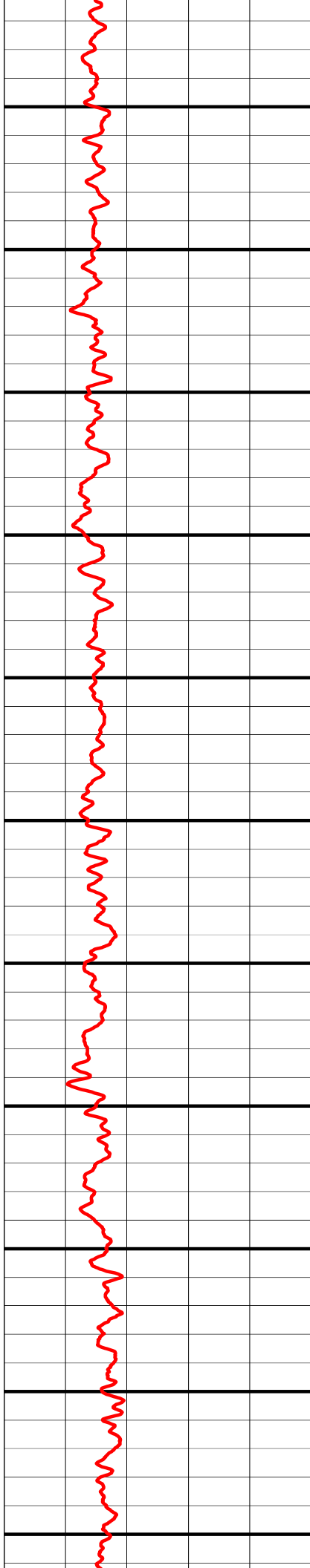
WELL Sunbelt Holdings 1-19
TYPE of LOGS Cement Bond
Date 04-18-18
SYSTEM NAME

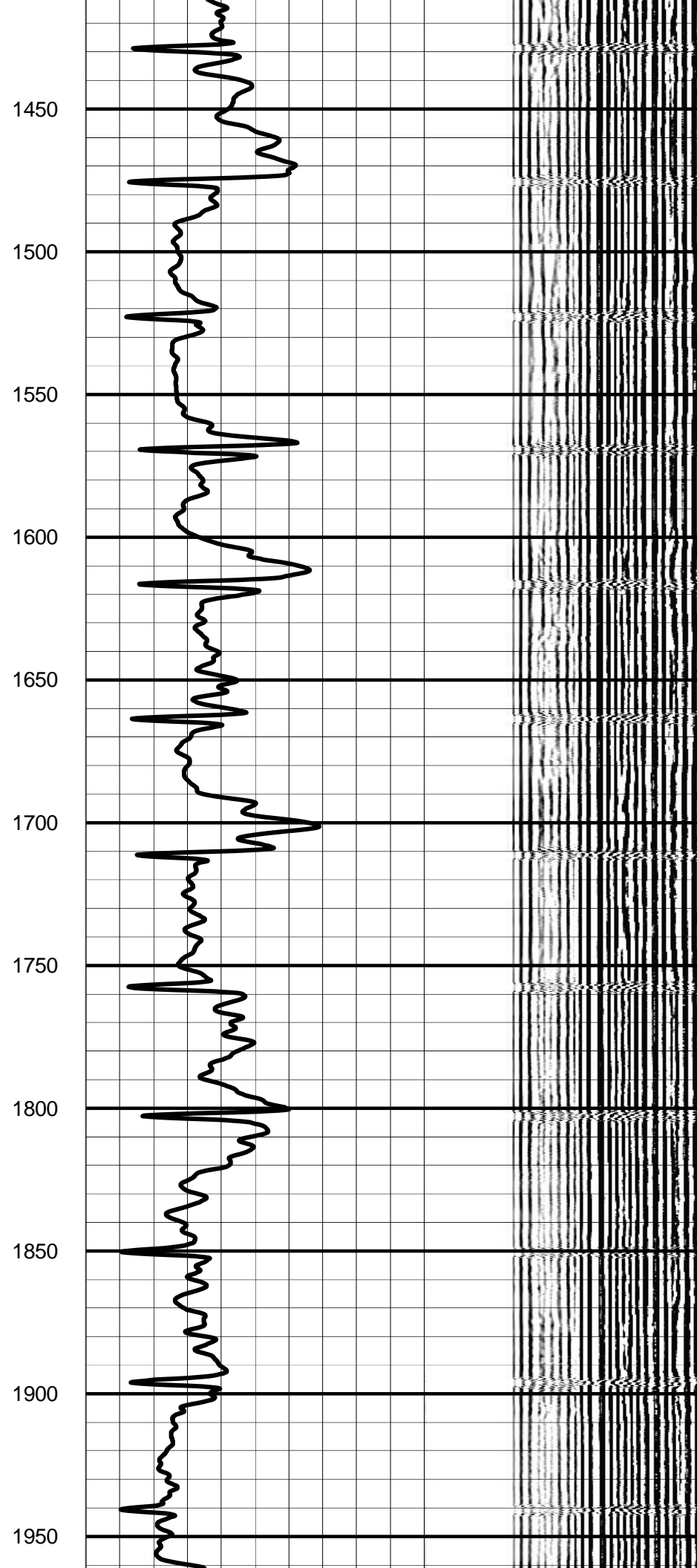
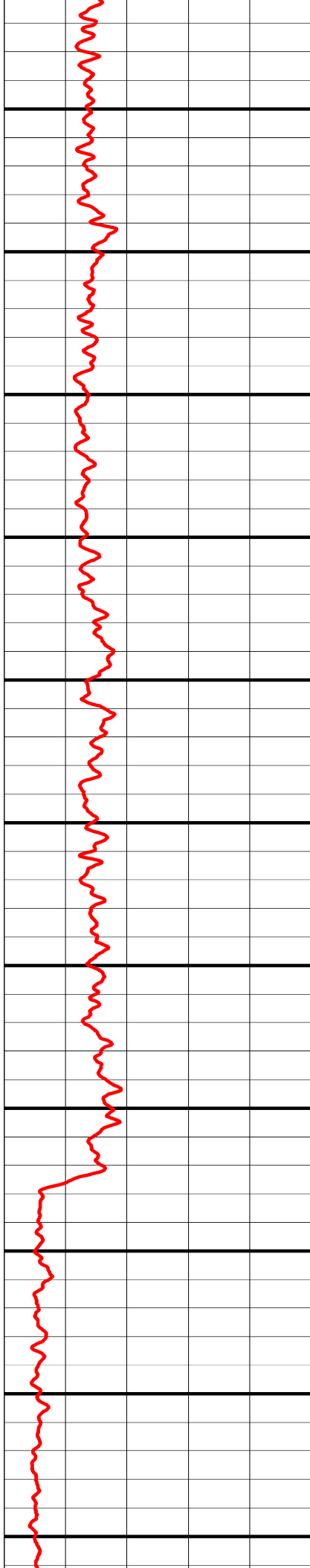
CLIENT	Southwest Groundwater Consultants	CEMENT BOND
WELL ID	1-19	
PROJECT	Sunbelt Holdings	
COUNTY	Maricopa	STATE Arizona
LOCATION	N 33 deg 30 min 25.8 sec W 112 deg 23 min 45.7 sec	OTHER SERVICES N/A
SEC	TWP	RGE

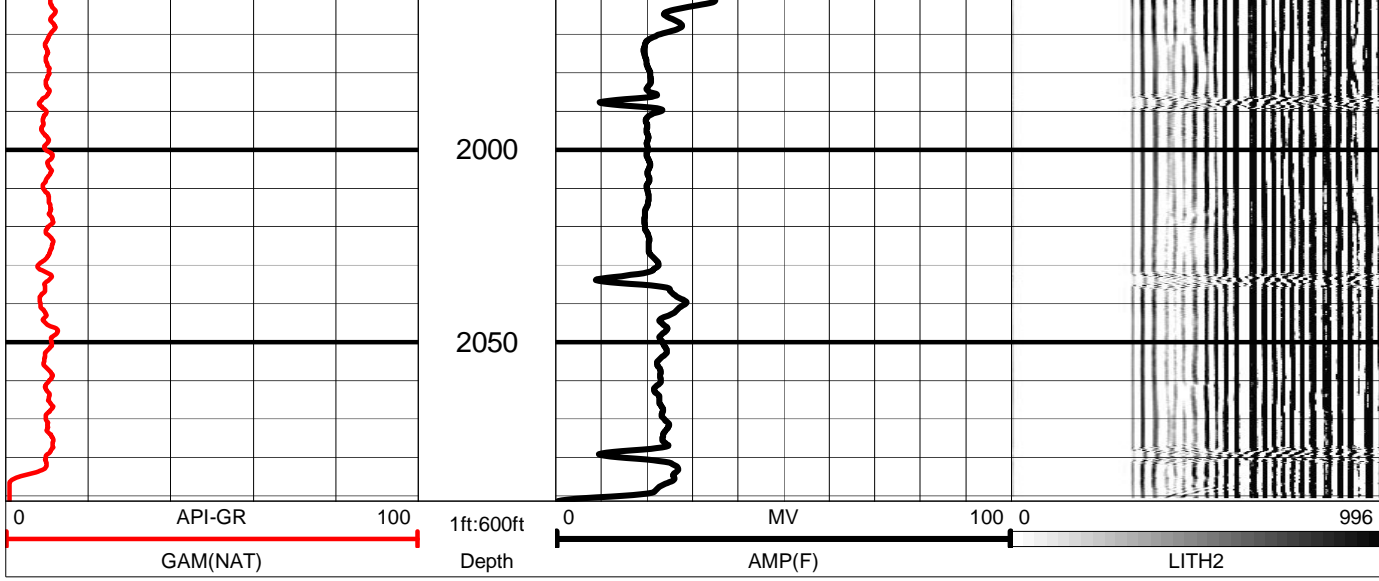
PERMANENT DATUM	Ground Level	ELEVATION G.L.	1,037 ft-amsl	K.B.
LOGS MEAS. FROM	Ground Level	SURFACE CONDUCTOR	N/A feet	D.F.
DRILLING MEAS. FROM	Ground Level			G.L.
DATE	04-18-18	TYPE FLUID IN HOLE	Salt Water	
RUN No	1	RES MUD	N/A	
WELL TYPE	N/A	RES MUD FILTRATE		
DEPTH-DRILLER	8,307 ft-bgl	RES WALL CAKE		
DEPTH-LOGGER	2,090 ft-bgl	MAX. REC. TEMP.		
ADDITIVES	N/A			
BIT TYPE	N/A			
DRILLING METHOD	N/A			
RECORDED BY	Chris Catalano			
WITNESSED BY	Southwest Groundwater			









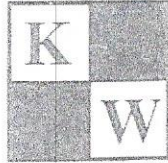




Mr. Bob Bambauer
SunCor 1-19 Abandonment Report
May 16, 2018

ATTACHMENT 6

WELL COORDINATE SURVEY



K – WEST SURVEYING, INC.
P.O. BOX 509
AVONDALE, AZ 85323

PHONE: 623-536-8248
FAX: 623-536-8247
CELL: 602-320-2333
E-MAIL: kwestsurvey@cox.net

April 05, 2018

Southwest Groundwater Consultants

Attn.: Kevin Hebert

Re: Monitoring Well # 1-19
South side Camelback Rd. and West of
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N. 912398.015 E. 553876.879

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Any questions regarding this matter, please contact K-West Surveying at the above information.

Wade H. Shaffer R.L.S.
vice-president





Mr. Bob Bambauer
SunCor 1-19 Abandonment Report
May 16, 2018

ATTACHMENT 7

PLUGGING RECORD

PLUGGING RECORD

Operator Formerly Copper Eagle Gas Storage, LLC		Address & Phone number Not Applicable	
Federal, State, or Indian Lease No. or lessor's name if fee lease Not Applicable		Well No. 1-19	Field & Reservoir Luke Field
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Not Applicable			

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Name	Address	Direction from this well
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Not Applicable

Use reverse side for additional detail

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Project Hydrogeologist of the Southwest Groundwater Consultants (company) and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

5-16-18
Date


Signature

Permit No. _____

Mail one copy of completed form to:
Oil and Gas Program Administrator
Arizona Department of Environmental Quality
1110 W. Washington Street
Phoenix, AZ 85007

email one copy to: ogcc@azdeq.gov

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Plugging Record

File two copies: one by mail, one electronically

Form No. 10

CTS: 376207

APPLICATION TO PLUG AND ABANDON

ADEQ
AIR QUALITY DIVISION

18 FEB 27 PM 1:12

FIELD Luke - Goodyear, Arizona

OPERATOR Formerly SunCor ADDRESS & PHONE N/A

LEASE NUMBER (Lessor's name if fee) N/A WELL NO. SunCor 1-19

LOCATION Cadastral Well Location - B(2-1) 19 AAB

TYPE OF WELL Oil and Gas Storage Well TOTAL DEPTH 8,307 ft
(Oil, Gas, or Dry)

ALLOWABLE (If Assigned) N/A

LAST PRODUCTION TEST OIL N/A (Bbls.) WATER N/A (Bbls.)
GAS N/A (MCF) DATE OF TEST N/A

PRODUCING HORIZON N/A PRODUCING FROM N/A TO N/A

1. COMPLETE CASING RECORD:

- Conductor Pipe (0 ft to 60 ft)
- 20" x 0.375" Wall Grade B Line Pipe
- Surface Casing (0 ft to 2,000 ft)
- 13 3/8" 68.00 #/ft K-55, HC, ERW, BTC (New, API, Prime)
- Production Casing (0 ft to 5,650 ft)
- 9 5/8" 43.5 #/ft HC P-110 LTC (New, API, Prime)

2. FULL DETAILS OF PROPOSED PLAN OF WORK:

See Attachment A

DATE COMMENCING OPERATIONS March 2018

NAME OF PERSON DOING WORK Southwest Waterworks Contractors, Inc. ADDRESS 2205 W. Grant Street, Phoenix, AZ 85005

[Signature]
Signature
SENIOR PROJECT HYDROGEOLOGIST
Title

3033 N. 44th Street, Ste. 120, PHOENIX, AZ 85018
Address

2/26/18
Date

Mail two copies of completed form to:
Oil and Gas Program Administrator
Arizona Department of Environmental Quality
1110 W. Washington Street
Phoenix, AZ 85007

Date Approved 3/8/2018
STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
By DL Turner

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Application to Plug and Abandon
File Two copies
Form No. 9

Permit No. 911

CTS.376208

(DUPLICATE)

APPLICATION TO PLUG AND ABANDON

ADEQ AIR QUALITY DIVISION

13 FEB 27 PM 1:12

FIELD Luke - Goodyear, Arizona
OPERATOR Formerly SunCor ADDRESS & PHONE N/A
LEASE NUMBER (Lessor's name if fee) N/A WELL NO. SunCor 1-19
LOCATION Cadastral Well Location - B(2-1) 19 AAB

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(Oil, Gas, or Dry)

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Signature [Handwritten Signature]

Title SENIOR PROJECT Hydrogeologist

Address 3033 N. 44th Street, Ste. 120, PHOENIX, AZ 85018

Date 2/26/18

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Arizona Department of Environmental Quality
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STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
By

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
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ATTACHMENT A

Details of Proposed Plan of Work

Details of Proposed Plan of Work

- Measure and record depth to groundwater.
- Install bridge plug, consisting of a rubber packer or similar, at least 60 feet into well.
- Confirm depth of bridge plug by tagging with a weighted measuring tape.
- Once bridge plug is confirmed to be at appropriate depth, a cement slurry, consisting of two (2) 94 lb sacks of Portland Type II cement, will be placed into the well using a centralized tremie pipe.
- Allow cement to set for a minimum of one hour.
- Tag surface of the plug to confirm placement.
- An additional cement mixture, consisting of two (2) 94 lb sacks of Portland Type II cement, will be placed in the well using a centralized tremie pipe.
- The second lift of the bridge plug will be allowed to cure for period of at least 8 hours.
- Place a final cement slurry from the top of the plug to a depth of within 10 feet of the surface.
- Remove the upper 10 feet of all well casing materials and all surface structures.
 - Excavate trench box to sufficient depth to facilitate removal of top 10-feet of casing materials.
 - Excavated portion around well will be backfilled and compacted with wheel and bucket tamping using clean imported fill material.
- Because future development of the site is proposed, it is requested that the requirement to install a permanent well marker be waived. A GPS measurement of the well location is proposed instead.



Douglas A. Ducey
Governor

State of Arizona
Oil and Gas Conservation Commission

1110 W. Washington Street, Phoenix, AZ 85007

602-771-4501

www.azogcc.az.gov

Dennis L. Turner, Oil and Gas Administrator

Commissioners:
Frank Thorwald, Chair
Vice Chair, vacant
Stephen R. Cooper
William C. Feyerabend
J. Dale Nations, Ph.D.

VIA EMAIL and US MAIL

January 31, 2018

Mr. Bob Bambauer
Senior Vice President
Sunbelt Holdings
6720 North Scottsdale Road, Suite 250
Scottsdale, AZ 85253-4424

RE: Plugging and Abandonment of Copper Eagle #1-19 (permit 911) and Copper Eagle #1-24 (permit 909)

Dear Mr. Bambauer:

The Arizona Oil and Gas Conservation Commission (OGCC or Commission) appreciates your time and input at the public meeting on January 12, 2018. As you recall, the OGCC discussed the matter of plugging and abandonment (P&A) of the two wells: Copper Eagle #1-19 (permit 911) and Copper Eagle #1-24 (permit 909). The P&A application that Southwest Groundwater Consultants submitted via email on November 16, 2017 does not meet the minimum requirements of Arizona Administrative Code (A.A.C.) R12-7-127(C) through R12-7-127(F).

At the January 12, 2018 meeting, the Commission approved the following procedures to plug and abandon the two referenced wells:

1. Sunbelt Holdings shall comply with A.A.C. R12-7-127(C)(3) to ensure that no annular space in each well extends from above the top of salt to the surface through any casing string. To document this condition to the satisfaction of the Commission, the recommended method is either to run a cement bond log, or a casing integrity log. Cement and casing integrity may be determined with existing or new cement bond logs or other evidence that the well is sealed from the surrounding formations and aquifers and from the Luke salt body below.
2. Place a cast iron bridge plug (CIBP) in each well at the approximate top of the salt body. The Commission recommended the CIBP be placed at a minimum depth of 2100 feet in both wells.
3. Below the CIBP, the entire wellbore shall be filled with plugging mud at the minimum weight specified in R12-7-127(D). Above the CIBP, the entire wellbore shall be filled with plugging cement to the surface. The preferred plugging cement slurry is that recommended by the American Petroleum Institute (API) Environmental Guidance Document: Well Abandonment and Inactive Well Practices for U.S. Exploration and Production Operations, i.e., a neat cement slurry mixed to API standards. The plugging cement slurry shall be allowed to cure for the times specified by API before proceeding with excavation work.
4. Remove the upper ten (10) feet of all well casing materials and all surface structures and install a heavy metal plate over all tubulars. The well location and identity shall be permanently inscribed on the plate as required in A.A.C. R12-7-106(A).

5. The excavated portion around well shall be backfilled first with three (3) to five (5) feet of granular material, liberally infused with bright colored, highly visible and permanent dye.
6. Over this layer, place clean imported fill material, compacted with wheel and bucket tamping.
7. The installation of a permanent above-ground well marker, pursuant to A.A.C. R12-7-127(F), is waived. Upon completion of placement of the five (5) feet of clean imported fill as cited in item 7 above, the ground surface shall be returned to its current condition.
8. The site shall be surveyed by a surveyor licensed in the state of Arizona, which shall include geodetic coordinates. The location shall be surveyed before the site is backfilled with the specified materials.
9. A temporary marker, the same or similar to that currently at the site, shall be placed above ground at the location of the well after all work is completed.
10. Photo-document the above required closure steps to confirm completion of the plug and abandonment of the wells to statute and rule.
11. The Application to Plug and Abandon, Attachment A, is hereby incorporated by reference as to Details of Proposed Plan of Work that are in agreement with the above stated conditions. The conditions as noted above control where there is any disagreement with Attachment A.

For existing well log interpretation to satisfy the requirements in 1. above, the Commission notes that Schlumberger provided a large portion of the electric downhole logs of record for the two wells and may be a good source for help with data interpretation. Additionally, the Commission recommends that Sunbelt review the OGCC well files for the two subject wells for logs available.

The Commission strongly recommends the use of drilling contractors experienced in the oilfield services with workovers and plugging and abandonment work. If additional cement work must be performed on either well, the commission suggests use of an oil field service contractor that is equipped to perform the additional cement work behind casing. If you require a list of suggested experienced contractors in this area, the Commission recommends that you contact the Interstate Oil and Gas Compact Commission, 405/522-8380 or communications@iogcc.ok.gov .

Please advise me via phone or email at least 48 hours in advance of the work commencing on each well. When the plugging work is completed on each well, in accordance with R12-7-127(I), submit a completed Form 10 within 15 days. Download this form at <http://www.azogcc.az.gov/forms> .

Please direct any questions and address all correspondence to:

Dennis L. Turner
Oil & Gas Administrator
Arizona Oil & Gas Conservation Commission
c/o Arizona Department of Environmental Quality
1110 W. Washington Street
Phoenix, AZ 85007
ogcc@azdeq.gov

Sincerely,



Dennis L. Turner

Oil & Gas Program Administrator

cc: Frank Thorwald, Chairman, Arizona Oil and Gas Conservation Commission (email only)
Kevin Hebert, Southwest Groundwater Consultants

