

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A Beneficial Use Field Report is prepared by a water right examiner as the result of an examination to clearly confirm and establish the extent of the beneficial use of water established in connection with a permit during the development period authorized by the permit and any extensions of time previously approved.

A. GENERAL INFORMATIONPermit No. 63-34147

1. Owner Mike Skogsberg And/Or Diamond S Farms LLC Phone No. 208-989-3990
Current address 23460 Stafford Rd, Caldwell, ID 83607
2. Examiner's name Cody Parker, Allen Bradbury EXAM DATE 08/08/2018
3. Accompanied by farm manager Email _____
Address _____
Relationship to permit holder farm manager Phone No. _____
4. Source groundwater tributary to _____

B. OVERLAP REVIEW

1. Other water rights with the same place of use Surface water (Black Canyon Irrigation)
2. Other water rights with the same source and point of diversion none

C. DIVERSION AND DELIVERY SYSTEM

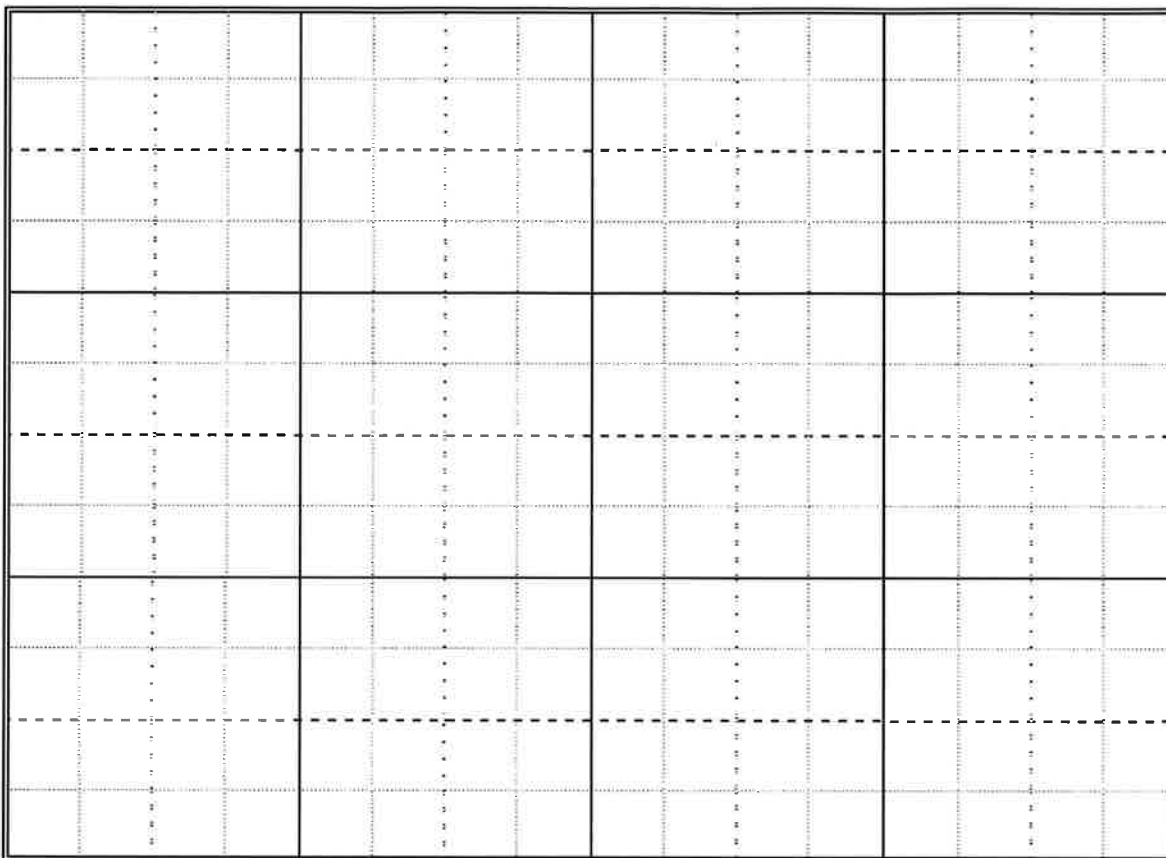
1. Point(s) of Diversion:

Ident. No.	Gov't Lot	¼	¼	¼	Sec	Twp	Rge	County	Method of Determination/Remarks
			SE	NE	25	05N	04W	Canyon	GPS, digital PLS mapping

2. Place(s) of Use: Method of determination aerial imagery, site visit, comments from the farm manager

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
05N	04W	25			1.6	32							35	37	36			35	176.6

3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe diameter (inside), as applicable. Use the space provided or ☒ see attached.



Scale: 1" = _____

- ☒ Copy of USGS Quadrangle attached showing location(s) of point(s) of diversion and place(s) of use (required)
☒ Aerial photo attached (required for irrigation of 10+ acres)
☒ Photo of diversion and system attached

4.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
D0071710	Franklin	30		Franklin	50 psi

*Code to correspond with no. on map and aerial photo

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
IM Flow Meter		IM	IM 3000			

2. Measurements: _____

30 hp pump, 60 psi discharge pressure, ~140 feet lift

E. NARRATIVE/REMARKS/COMMENTS

The point of diversion is a 12" well with a 30 hp pump. Water is pumped through a six-inch line with an IM Flow Meter. The line forks into two six-inch lines downstream of the flow meter. One line runs to a drip system that is used to water approximately 34.6 acres of onions north and west of the well. The second line runs south and provides water to several handlines, gated pipe, and a pivot system. Just past the pivot center water is discharged into an open concrete ditch and is conveyed west 1/4 mile to two 40-acre fields of corn. Water is diverted from the ditch to the fields using siphon tubes.

At the time of the exam, the flow meter showed 391 gpm diversion (0.87 cfs). As far as I could tell, the pivot was the only component of the system running at the time. Operating pressure at the well head was 50 psi.

The well log shows a static water level at 38 feet. During the pumping test done by the driller the "drawdown" was 100 ft. It is unclear whether this figure is actual drawdown or pumping level. However, if it is considered to be pumping level then the theoretical diversion rate predicted by the water horsepower equation is 0.86 cfs which is almost the exact same rate we observed during the field exam.

According to the farm manager we spoke with, the two fields east of Stafford Road that were included in the permit POU do not receive water from the well. The total acreage recommended for the license is 176.6, down from the permitted 200.

There are no overlapping uses of the well. Surface water from the Black Canyon Irrigation District is used as the primary water source for irrigation of these same acres.

The image from the system diagram was taken from 2015. The 2015 imagery depicts the system and use as it was observed at the time of the exam. There is no 2016 imagery available for use.

Has the permit holder met all conditions of permit approval, including any mitigation requirements and/or measuring device installation requirements? ☒ Yes ☐ No If no, what must be done to meet the permit requirements?

The PPU wasn't developed. The same fields were irrigated during the development period. Removed X27 and 206 accordingly.

F. FLOW CALCULATIONS☐ Additional computation sheets attached

Measured Method:

Theoretical: $Q = 30 \text{ hp} \times 8.8 \times 0.7 / (100 \text{ ft} + 2.31 \times 50 \text{ psi}) = 0.86 \text{ cfs}$

Flow meter = 391 gpm = 0.87 cfs

BU Standard = 0.02 cfs/acre x 176.6 acres = 3.50 cfs

Fee Rate = 3.0 cfs

RECOMMEND 0.87 cfs

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

 $V_{I,R} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 176.6 \text{ acres} \times 4.5 \text{ afa/acre} = 794.7 \text{ afa}$ $V_{D,R} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 = 0.87 \text{ cfs} \times 260 \text{ days} \times 1.9835 = 448.7 \text{ afa}$ $V = \text{Smaller of } V_{I,R} \text{ and } V_{D,R} = 448.7 \text{ afa}$

2. Volume Calculations for Other Uses:

No other uses

H. RECOMMENDATIONS

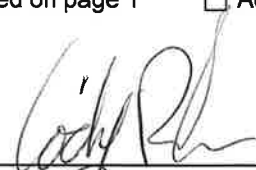
1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion	Annual Volume
	From	To	Q (cfs)	V (afa)
Irrigation	3/1	11/15	0.87 cfs	449 afa
Totals:			0.87 cfs	449 afa

2. Recommended Amendments

☐ Change P.D. as reflected on page 1☐ Add P.D. as reflected on page 1☒ None☐ Change P.U. as reflected on page 1☐ Add P.U. as reflected on page 1☐ Other**I. AUTHENTICATION**

Field Examiner's Signature



Date

9-10-18

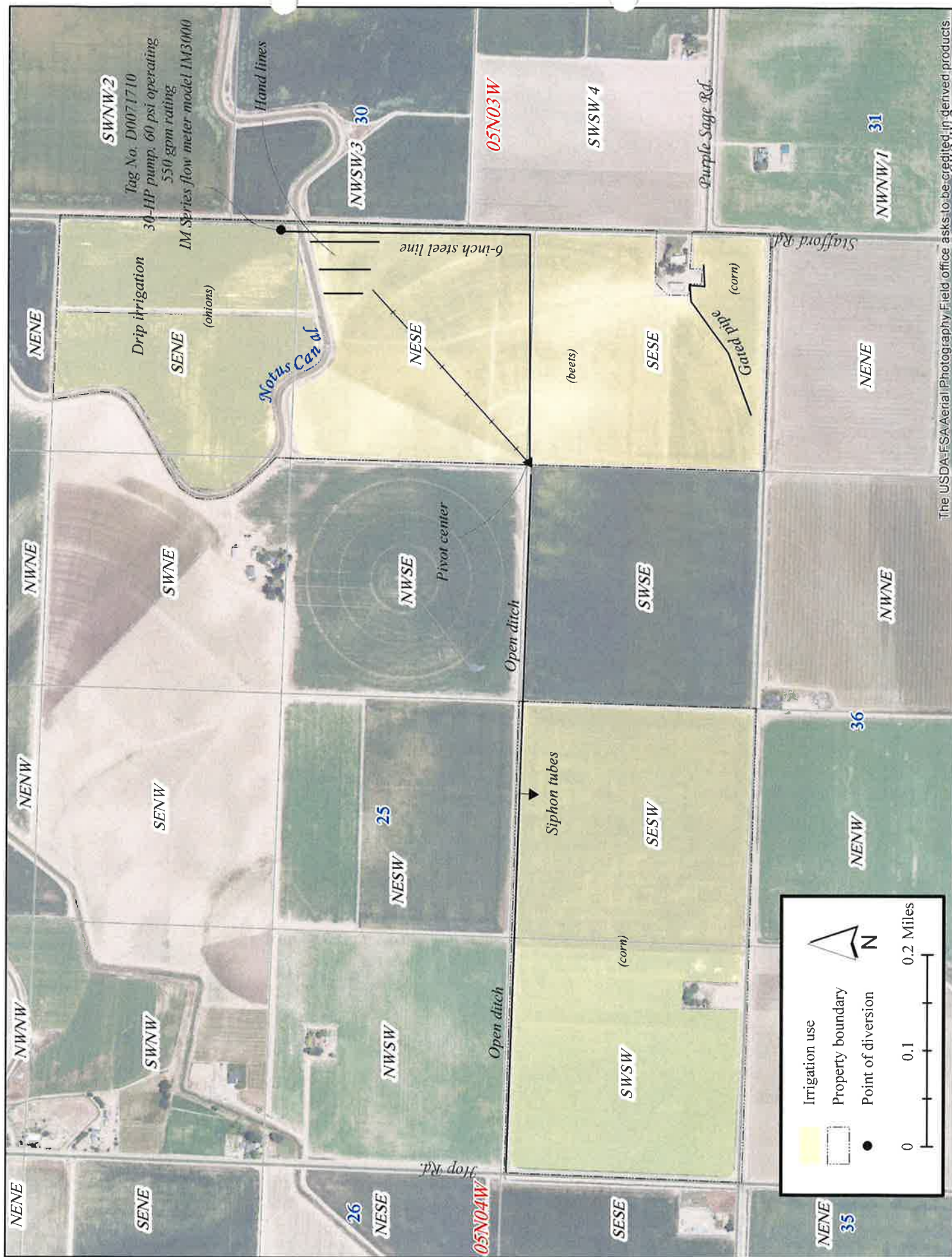
Reviewer:



Date

9/11/18

SEAL



State of Idaho
Department of Water Resources
Beneficial Use Field Report
63-34147

This map depicts the IRRIGATION place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.



0 0.15 0.3 0.6 Miles

-  Point of Diversion
-  Place Of Use Boundary
-  Townships
-  PLS Sections



05N04W25

Basin/Seq#	Owner	Source	Use	NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	SESE	Total Acres
63-20791	HULTZ F/	GROUND	DOMESTIC			X														
63-20796	HULTZ F/	GROUND	DOMESTIC										X							
63-2322	UNITED S	ELIJAH S	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-2322	UNITED S	WILSON S	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-26829	HUERTA	GROUND	DOMESTIC																X	
63-27013	ASCUAG/	GROUND	DOMESTIC	X																
63-27175	MARK WE	GROUND	DOMESTIC											X						
63-27175	MARK WE	GROUND	STOCKWATER											X						
63-2878	BLACK C.	ELIJAH D	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-2878	BLACK C.	WILSON I	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-34147	DIAMON	GROUND	IRRIGATION			1.6	32							35	37	36			35	176.6
63-4472	JAVAUX,	GROUND	STOCKWATER						X	X										
63-8682	HULTZ F/	GROUND	IRRIGATION			33	3		7	37	38	35	35				37	38		228
65-2433	UNITED S	PAYETTE	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
65-2900	BLACK C.	TUNNEL I	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Same QQ non-irrigation use, no overlap

Black Canyon Irrigation District, primary irrigation use, overlap

Same QQ separate irrigated acres, no overlap

BENEFICIAL USE FIELD REPORT

05N04W25

Basin/Sequit Owner Source

63-20791 HULTZ F/ GROUND WATER
 63-20796 HULTZ F/ GROUND WATER
 63-26829 HUERTA GROUND WATER
 63-27013 ASCUAG/ GROUND WATER
 63-27175 MARKWE GROUND WATER
63-34147 DIAMON GROUND WATER
 63-4472 JAVAUX, GROUND WATER
 63-8682 HULTZ F/ GROUND WATER

NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	SESE
		X							X						
X															X
										X					
			X												
		X													

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT
Picture Attachment



Figure 1. The POD is a 12-inch well w/ metal tag no. D0071710



Figure 2. The totalizing flow meter read ~391 gpm (0.87 cfs) during the field exam. The pivot appeared to be the only component running at the time. The rate shown closes matches the theoretical rate predicted by the horsepower equation.

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT
Picture Attachment



Figure 3. *The operating pressure at the well head during the exam was 50 psi.*



Figure 4. *Some of the irrigation developed at the place of use.*

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT
Picture Attachment



43

IDAHO DEPARTMENT OF WATER RESOURCES WELL DRILLER'S REPORT

1. WELL TAG NO. D 0071710

Drilling Permit No. 972929-878077

Water right or injection well # 63-34147

2. OWNER:

Name Mike Skogsberg

Address 23460 Stafford Rd.

City Caldwell State ID Zip 83607

3. WELL LOCATION:

Twp. 5 North ☒ or South ☐ Rge. 4 East ☐ or West ☒
Sec. 25 1/4 SE 1/4 NE 1/4

Gov't Lot _____ County Canyon

Lat. 43 44.524 (Deg. and Decimal minutes)

Long. 116 45.198 (Deg. and Decimal minutes)

Address of Well Site W side of Stafford between Galloway and Purple Sage Rds City Caldwell

Lot _____ Blk. _____ Sub. Name _____

4. USE:

☐ Domestic ☐ Municipal ☐ Monitor ☒ Irrigation ☐ Thermal ☐ Injection
☐ Other _____

5. TYPE OF WORK:

☒ New well ☐ Replacement well ☐ Modify existing well
☐ Abandonment ☐ Other _____

6. DRILL METHOD:

☒ Air Rotary ☒ Mud Rotary ☐ Cable ☐ Other _____

7. SEALING PROCEDURES:

Seal material	From (ft)	To (ft)	Quantity (lbs or ft ³)	Placement method/procedure
Ben/cem	6	38	28.8cu/ft	tremie
3/4bentonite	0	6	300lbs	dry pour

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/Schedule	Material	Casing Liner	Threaded	Welded
12"	+2	45	.250	steel	☒	☐	☒
12"	89	129	.250	steel	☒	☐	☒
12"	139	192	.250	steel	☒	☐	☒
					☐	☐	☐

Was drive shoe used? ☐ Y ☒ N Shoe Depth(s) _____

9. PERFORATIONS/SCREENS:

Perforations ☒ Y ☐ N Method _____

Manufactured screen ☒ Y ☐ N Type alloy machine works

Method of installation placed

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule
45	87	.030	---	12"	stainless	
129	139	.030	---	12"	stainless	
192	202	.030	---	12"	stainless	

Length of Headpipe _____ Length of Tailpipe _____

Packer ☐ Y ☒ N Type _____

10. FILTER PACK:

Filter Material	From (ft)	To (ft)	Quantity (lbs or ft ³)	Placement method
6-12	38	197	8250lbs	tremie

11. FLOWING ARTESIAN:

Flowing Artesian? ☐ Y ☒ N Artesian Pressure (PSIG) _____

Describe control device _____

12. STATIC WATER LEVEL and WELL TESTS:

Depth first water encountered (ft) 38ft Static water level (ft) 38ft

Water temp (°F) 58degF Bottom hole temp. (°F) _____

Describe access port weld on black nipple with threaded cap

Well test:

Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)
100	535	120

Test method:

Pump	Bailer	Air	Flowing artesian
☒	☐	☐	☐

Water quality test or comments: _____

13. LITHOLOGIC LOG and/or repairs or abandonment:

Bore Dia. (in)	From (ft)	To (ft)	Remarks, lithology or description of repairs or abandonment, water temp.	Water	
				Y	N
16"	0	10	hard brown clay		X
"	10	25	coarse sand		X
"	25	40	sandy clay		X
"	40	58	gravel and sand	X	
"	58	64	coarse sand	X	
"	64	68	gravel and sand	X	
"	68	85	coarse sand	X	
"	85	108	tan clay		X
"	108	112	coarse sand	X	
"	112	125	tan clay		X
"	125	139	coarse sand	X	
"	139	146	sandy clay		X
"	146	148	sand	X	
"	148	186	tan clay		X
"	186	203	sand	X	
"	203	208	tan clay		X

RECEIVED

APR 11 2016

WATER RESOURCES
WESTERN REGION

Completed Depth (Measurable) 204

Date Started: Mar 7, 2016

Date Completed: Mar 29, 2016

14. DRILLER'S CERTIFICATION:

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name Cochise Well Drilling

Co No 409

*Principal Driller [Signature]

Date Mar 30, 2016

*Driller [Signature]

Date Mar 30, 2016

*Operator II [Signature]

Date _____

Operator I [Signature]

Date 4/8/16

* Signature of Principal Driller and rig operator are required.