

Rebekah Reams  
Spill Prevention and Response, Contaminated Sites Program  
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(907) 451-2144

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Oregon 97201  
Tel 503 785 9388  
[www.arcadis.com](http://www.arcadis.com)

Subject:  
Well Abandonment Report  
Former Unocal Station 5580 (Cline's Tesoro)  
442 Gambell Street  
Anchorage, Alaska

ENVIRONMENT

ADEC File No: 2100.26.112  
Hazard ID: 23368

Date:  
September 4, 2020

Dear Rebekah Reams:

Contact:  
Max Elias

On behalf of Chevron Environmental Management Company (CEMC), Arcadis U.S., Inc. (Arcadis) has prepared this report summarizing the activities related to the abandonment of the remaining 5 wells associated with Cline's Tesoro/Former Unocal Station 5580, located at 442 Gambell Street Anchorage, Alaska ("the Site"; Figure 1). All remaining wells (MW-1, MW-2, MW-3, MW-8, and MW-9) associated with the site have been abandoned. Well abandonment activities were conducted in accordance with the ADEC's 2013 Monitoring Well Guidance and the 2019 Work Plan for Well Abandonment submitted by Arcadis on January 21<sup>st</sup>, 2020 and approved on March 16<sup>th</sup>, 2020.

Phone:  
503-773-8582

Email:  
[Maxwell.Elias@arcadis.com](mailto:Maxwell.Elias@arcadis.com)

Our ref:  
30045551

## BACKGROUND

The site is currently an active gasoline service station located on the northwestern corner of the intersection of 5<sup>th</sup> Street and Gambell Street in Anchorage, Alaska. The current facilities at the site includes one three-chamber UST, station building, and two dispenser islands with associated product piping. Properties in the vicinity of the site are commercial and industrial lots.

## PRE-FIELD ACTIVITIES

As required by the Occupational Safety and Health Administration (OSHA) 29 Code of Federal Regulations (CFR) 1910.120 (Hazardous Waste Operations and Emergency Responses), Arcadis updated the site-specific Health and Safety Plan to address the health and safety issues related to the field activities conducted on and off the site.

The 811 Dig line for the State of Alaska was notified July 15, 2020 (811 ticket number: 2020290932). On September July 21, 2020, a private locating company, Geotek Alaska, conducted ground-penetrating radar (GPR) and low-frequency electromagnetic scans of the work zones to identify potential subsurface utilities. Potential utilities identified were marked-out on the ground surface with paint and documented in field notes.

## FIELD ACTIVITIES

On July 23, 2020, Geotek Alaska, under the supervision and direct oversight by Arcadis staff, completed the well abandonment activities. Construction details for the destroyed wells are shown in Table 1. The Well Record of Decommissioning forms are included in Attachment A and will be submitted to the Alaska Department of Natural Resources. Available original boring logs are included within the Well Record of Decommissioning forms.

During abandonment activities, depth to water at each well was gauged and total depth confirmed in comparison to the corresponding boring log or historical data. The well caps were then knocked out from the bottom of the well using a drill rod. The PVC casing was then removed to the top of the water column, allowing the aquifer material to naturally collapse. The casing was then used as a tremie pipe and bentonite chips were placed into the borehole and hydrated. The well lids, rings, and skirts were removed via hand tools.

During the removal of MW-9, the well casing was broken at 5 feet below ground surface. In accordance with ADEC well abandonment guidelines, the well screen was filled with sand and the rest of the casing was filled with hydrated bentonite chips. The well construction details for MW-9 are presented in Attachment A and demonstrate a competent annular seal.

## WASTE DISPOSAL

Clean asphalt debris, well casings, and well box debris were properly disposed of offsite by Geotek Alaska as commercial waste.

## CLOSING

Arcadis submits this report to document the abandonment of the 5 on-site wells. The well abandonment activities were conducted in accordance with the ADEC well decommissioning guidelines.

If you have any questions regarding site activities, please contact Max Elias by phone at 503.773.8582 or by email at Maxwell.Elias@arcadis.com.

Sincerely,

Arcadis



Max Elias  
Project Manager



J. Russell Greisler  
Senior Geologist

Enclosures:

### Tables

- 1 Well Destruction Details

### Figures

- 1 Site Location Map
- 2 Site Plan

### Attachments

- A Well Record of Decommissioning Forms
- B Utility Locate and Well Abandonment Field Notes

# Tables



Table 1. Well Destruction Details  
 Former Chevron Service Station 306451  
 442 Gambell Street  
 Anchorage, Alaska

Well ID	Well Completion Date	Well Destruction Date	Well Destruction Method	TOC Elevation (ft amsl)	Total Depth (ft bgs)	Screen Interval (ft bgs)	Screen Length (ft)	Well Diameter (in)
MW-1	NA	7/23/2020	Well casing completely removed	113.75	36.8	NA	NA	2" PVC
MW-2	NA	7/23/2020	Well casing completely removed	114.56	39.7	NA	NA	2" PVC
MW-3	NA	7/23/2020	Well casing completely removed	114.38	38.8	NA	NA	2" PVC
MW-8	12/2/2004	7/23/2020	Well casing completely removed	114.92	43	34 - 44	10	2" PVC
MW-9	7/18/2010	7/23/2020	Well screen filled with sand, casing removed to 5 ft. bgs	115.28	44.8	34 - 44	10	2" PVC

**Notes:**

MW = Groundwater monitoring well  
 TOC = Top of casing  
 ft bgs = feet below ground surface  
 NA = Not Available

# Figures









# Attachment A

## Well Record of Decommissioning Forms





Department of Natural Resources  
 Division of Mining, Land & Water  
 550 w 7th Ave., Suite 1020  
 Anchorage, AK 99501-3562  
 dnr.water.reports@alaska.gov



Department of Environmental Conservation  
 Division of Environmental Health, Drinking Water Program  
 555 Cordova Street  
 Anchorage, AK 99501  
 dec.eh.drinkingwater.reports@alaska.gov

State  
 of  
 Alaska



### Well Record of Decommissioning

This form is intended to convey information regarding the decommissioning of a water well as required by both DEC and DNR. Add additional datasheets as necessary.

Well Decommissioner or Contractor	Well and Owner Particulars *
Name: Evan Wujcik	Owner's name and address: Chevron Environmental Management Company / 6001 Bollinger Canyon Road, Room C2102, San Ramon, California 94583
Company: Arcadis	Well location - Street & number: 442 Gambell St Anchorage, AK
Address: 880 H Street, Suite 101, Anchorage, AK 99501	Well location - Subdivision, Lot & Block:
Phone: 814-392-0040	Meridian: _____ Township: _____ Range: _____ Section: _____ Quarters: _____
Email: Evan.Wujcik@arcadis.com	GPS (to 5 places): Latitude: 61.217727 Longitude: -149.871636 Datum: _____
	Well Name or Number: MW-1

Please check all boxes that apply and provide all requested information. Do not check boxes that do not apply. \* Note, Do not enter locational information for public water supplies - see note \*\*, below.

Details of Former Well	Former Well Description (Not required if original well log attached).			
Public water system? (See note **) Yes: <input checked="" type="checkbox"/> No: <input checked="" type="checkbox"/>	Original Driller's Name: unknown		Well depth (ft bls): 36.8	Date of completion: 7 / 23 / 2020
If so, PWSID number: _____	Well Type	Drilled? Yes: <input checked="" type="checkbox"/> No: <input checked="" type="checkbox"/>	Static water bls: 35.54	Flowing artesian? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> N/A Unknown
Single Family Domestic? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>	Driven? Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>	Capped? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> N/A Unknown	Bedrock (ft bls): _____	Flood prone site? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> N/A Unknown
Commercial/ Fishery? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>	Jetted? Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>	Screened? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> N/A Unknown	Casing type: PVC	Well condition? Good: <input checked="" type="checkbox"/> Poor: <input type="checkbox"/> N/A Unknown
Irrigation/Agricultural? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>	Dug? Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>	Perforated? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> N/A Unknown	Diameter (inches): 2	Grouted? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> N/A Unknown
Heating / Cooling? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>	Unknown? Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>	Well liner present? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> N/A Unknown	Stickup (ft): NA	Well house? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> N/A Unknown

\*\* Public Water System decommissioning may require additional documentation, please contact DEC in this regard.

Decommissioning notes:	Reason for well decommissioning:	Decommissioning process			
Include notes regarding any deviations from state approved methods of decommissioning the well.	Preparation for site closure	Casing cut below grade? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> N/A Unknown	Well disinfected prior to decommissioning? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> N/A Unknown	Plumbing removed from casing? Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/> N/A Unknown	
Well casing removed and used as tremie pipe		Casing fully removed? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> N/A Unknown	Casing filled w/ bentonite? Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/> N/A Unknown	Liner (if any) removed? Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/> N/A Unknown	
Bentonite chips filled into casing hole	Excavation and Fill Details	Casing welded closed? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> N/A Unknown	Borehole refilled? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> N/A Unknown	Electric wiring removed from site? Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/> N/A Unknown	
Well lid and monument vault removed		Excavation Depth (ft)? 35.54	Screened area filled with gravel? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> N/A Unknown	Attached an original well log? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> N/A Unknown	
Hole filled with sand		Type of fill used? bentonite	Perforated area filled with gravel? Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/> N/A Unknown	Well log listed at DNR? Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/> N/A Unknown	
Asphalt contoured to parking lot		Volume of fill (cu ft)? ~ 0.77	Excavated pit refilled? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> N/A Unknown	Local authorities notified? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> N/A Unknown	
	# Bags of bentonite in casing? ~ 2 bags	Pit area mounded? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> N/A Unknown	DEC notified of decommissioning? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> N/A Unknown		
			DNR notified of decommissioning? Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/> N/A Unknown		

Signatures (\*\*\* => are required)

Owner***: James Kiernan  OBO CEMC Date: 9 / 1 / 20	Decommissioner / Contractor***: Evan Wujcik Date: 07 / 23 / 2020
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- 1) Deliver this form to DNR and DEC within 45 days of decommissioning, as per state regulations 11 AAC 93.140.
- 2) Attach an original water well log, if available. A blank water well log form is available for use if the lithology and well construction details are known but the original water well log is missing.
- 3) Attach any maintenance or water usage records that may apply to this well and provide an adequate locational description, including maps or sketches. Use additional pages as needed.
- 4) This form is under development and is subject to change. Please submit suggestions for changes or improvements to either DNR or DEC at the addresses listed above.

Please attach schematics and photos to further document the information provided on this form. This is particularly important for public water supply wells and also any other wells that might impact the public water supply.



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dnr.water.reports@alaska.gov



Department of Environmental Conservation  
Division of Environmental Health, Drinking Water Program  
555 Cordova Street  
Anchorage, AK 99501  
dec.eh.drinkingwater.reports@alaska.gov

State  
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Alaska



### Well Record of Decommissioning

This form is intended to convey information regarding the decommissioning of a water well as required by both DEC and DNR. Add additional datasheets as necessary.

Well Decommissioner or Contractor	Well and Owner Particulars *
Name: Evan Wujcik	Owner's name and address: Chevron Environmental Management Company / 6001 Bollinger Canyon Road, Room C2101, San Ramon, California 94583
Company: Arcadis	Well location - Street & number: 442 Gambell St Anchorage, AK
Address: 880 H Street, Suite 101, Anchorage, AK 99501	Well location - Subdivision, Lot & Block:
Phone: 814-392-0040	Meridian: _____ Township: _____ Range: _____ Section: _____ Quarters: _____
Email: Evan.Wujcik@arcadis.com	GPS (to 5 places): Latitude: 61.217696 Longitude: -149.871258 Datum: _____
	Well Name or Number: MW-2

Please check all boxes that apply and provide all requested information. Do not check boxes that do not apply. \* Note, Do not enter locational information for public water supplies - see note \*\*, below.

Details of Former Well	Former Well Description (Not required if original well log attached).		
Public water system? (See note **) Yes: <b>No:X</b>	Original Driller's Name: unknown		Well depth (ft bls): 39.7
If so, PWSID number: _____	Well Type	Drilled? <b>Yes:X</b> No: _____	Static water (ft bls): 36.31
Single Family Domestic? Yes: <b>No:X</b>	Driven? Yes: <b>No:X</b>	Capped? <b>Yes:X</b> No: _____	Bedrock (ft bls): _____
Commercial/ Fishery? Yes: <b>No:X</b>	Jetted? Yes: <b>No:X</b>	Screened? <b>Yes:X</b> No: _____	Casing type: PVC
Irrigation/Agricultural? Yes: <b>No:X</b>	Dug? Yes: <b>No:X</b>	Perforated? Yes: <b>No:X</b> N/A Unknown	Diameter (inches): 2
Heating / Cooling? Yes: <b>No:X</b>	Unknown? Yes: <b>No:X</b>	Well liner present? Yes: <b>No:X</b> N/A Unknown	Stickup (ft): NA
			Well condition? <b>Good:X</b> Poor: _____
			Grouted? Yes: <b>No:X</b> N/A Unknown
			Well house? Yes: <b>No:X</b> N/A Unknown

\*\* Public Water System decommissioning may require additional documentation, please contact DEC in this regard.

Decommissioning notes:	Reason for well decommissioning:	Decommissioning process	
Include notes regarding any deviations from state approved methods of decommissioning the well.	Preparation for site closure	Casing cut below grade? Yes: <b>No:X</b> N/A Unknown	Well disinfected prior to decommissioning? Yes: <b>No:X</b> N/A Unknown
Well casing removed and used as tremie pipe		Casing fully removed? <b>Yes:X</b> No: _____	Plumbing removed from casing? Yes: <b>No:</b> N/A Unknown
Bentonite chips filled into casing hole	Excavation and Fill Details	Casing filled w/ bentonite? <b>Yes:</b> No: _____	Liner (if any) removed? Yes: <b>No:</b> N/A Unknown
Well lid and monument vault removed		Casing welded closed? Yes: <b>No:X</b> N/A Unknown	Electric wiring removed from site? Yes: <b>No:</b> N/A Unknown
Hole filled with sand		Borehole refilled? <b>Yes:X</b> No: _____	Attached an original well log? Yes: <b>No:X</b> N/A Unknown
Asphalt contoured to parking lot		Screened area filled with gravel? Yes: <b>No:X</b> N/A Unknown	Well log listed at DNR? Yes: <b>No:</b> N/A Unknown
	Excavation Depth (ft)? 36.31	Perforated area filled with gravel? Yes: <b>No:</b> N/A Unknown	Local authorities notified? <b>Yes:X</b> No: _____
	Type of fill used? bentonite	Excavated pit refilled? <b>Yes:X</b> No: _____	DEC notified of decommissioning? <b>Yes:X</b> No: _____
	Volume of fill (cu ft)? ~ 0.79	Pit area mounded? Yes: <b>No:X</b> N/A Unknown	DNR notified of decommissioning? <b>Yes:</b> No: _____
	# Bags of bentonite in casing? ~ 1.5 bags		

Signatures (\*\* => are required)

Owner\*\*\*: James Kiernan

*[Signature]* OBO CEMC

Date: 9 / 1 / 20

Decommissioner / Contractor\*\*\*: Evan Wujcik

*[Signature]*

Date: 07 / 23 / 2020

- 1) Deliver this form to DNR and DEC within 45 days of decommissioning, as per state regulations 11 AAC 93.140.
- 2) Attach an original water well log, if available. A blank water well log form is available for use if the lithology and well construction details are known but the original water well log is missing.
- 3) Attach any maintenance or water usage records that may apply to this well and provide an adequate locational description, including maps or sketches. Use additional pages as needed.
- 4) This form is under development and is subject to change. Please submit suggestions for changes or improvements to either DNR or DEC at the addresses listed above.

Please attach schematics and photos to further document the information provided on this form. This is particularly important for public water supply wells and also any other wells that might impact the public water supply.



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555 Cordova Street  
Anchorage, AK 99501  
dec.eh.drinkingwater.reports@alaska.gov

State  
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### Well Record of Decommissioning

This form is intended to convey information regarding the decommissioning of a water well as required by both DEC and DNR. Add additional datasheets as necessary.

Well Decommissioner or Contractor	Well and Owner Particulars *
Name: <u>Evan Wujcik</u>	Owner's name and address: <u>Chevron Environmental Management Company / 6001 Bollinger Canyon Road, Room C2102, San Ramon, California 94583</u>
Company: <u>Arcadis</u>	Well location - Street & number: <u>442 Gambell St Anchorage, AK</u>
Address: <u>880 H Street, Suite 101, Anchorage, AK 99501</u>	Well location - Subdivision, Lot & Block: _____
Phone: <u>814-392-0040</u>	Meridian: _____ Township: _____ Range: _____ Section: _____ Quarters: _____
Email: <u>Evan.Wujcik@arcadis.com</u>	GPS (to 5 places): Latitude: <u>61.218006</u> Longitude: <u>-149.871330</u> Datum: _____
	Well Name or Number: <u>MW-3</u>

Please check all boxes that apply and provide all requested information. Do not check boxes that do not apply. \* Note, Do not enter locational information for public water supplies - see note \*\*, below.

Details of Former Well	Former Well Description (Not required if original well log attached).	
Public water system? (See note **) Yes: <u>No:X</u>	Original Driller's Name: <u>unknown</u>	Well depth (ft bls): <u>38.8</u>
If so, PWSID number: _____	Well Type	Static water (ft bls): <u>36.78</u>
Single Family Domestic? Yes: <u>No:X</u>	Drilled? Yes: <u>X</u> No: <u>No:X</u>	Bedrock (ft bls): _____
Commercial/ Fishery? Yes: <u>No:X</u>	Driven? Yes: <u>No:X</u>	Casing type: <u>PVC</u>
Irrigation/Agricultural? Yes: <u>No:X</u>	Jetted? Yes: <u>No:X</u>	Diameter (inches): <u>2</u>
Heating / Cooling? Yes: <u>No:X</u>	Dug? Yes: <u>No:X</u>	Stickup (ft): <u>NA</u>
	Unknown? Yes: <u>No:X</u>	Well condition? Good: <u>X</u> Poor: <u>No:X</u> N/A: <u>Unknown</u>
	Finish	Flowing artesian? Yes: <u>No:X</u> N/A: <u>Unknown</u>
	Cased? Yes: <u>X</u> No: <u>No:X</u>	Flood prone site? Yes: <u>No:X</u> N/A: <u>Unknown</u>
	Capped? Yes: <u>X</u> No: <u>No:X</u>	Well Grouted? Yes: <u>No:X</u> N/A: <u>Unknown</u>
	Screened? Yes: <u>X</u> No: <u>No:X</u>	Well house? Yes: <u>No:X</u> N/A: <u>Unknown</u>
	Perforated? Yes: <u>No:X</u> N/A: <u>Unknown</u>	
	Well liner present? Yes: <u>No:X</u> N/A: <u>Unknown</u>	

\*\* Public Water System decommissioning may require additional documentation, please contact DEC in this regard.

Decommissioning notes:	Reason for well decommissioning:	Decommissioning process	
Include notes regarding any deviations from state approved methods of decommissioning the well.	Preparation for site closure	Casing cut below grade? Yes: <u>No:X</u> N/A: <u>Unknown</u>	Well disinfected prior to decommissioning? Yes: <u>No:X</u> N/A: <u>Unknown</u>
Well casing removed and used as tremie pipe		Casing fully removed? Yes: <u>X</u> No: <u>No:X</u>	Plumbing removed from casing? Yes: <u>No:</u> N/A: <u>X</u> Unknown: <u>No:</u>
Bentonite chips filled into casing hole	Excavation and Fill Details	Casing filled w/ bentonite? Yes: <u>No:X</u> N/A: <u>Unknown</u>	Liner (if any) removed? Yes: <u>No:</u> N/A: <u>X</u> Unknown: <u>No:</u>
Well lid and monument vault removed		Casing welded closed? Yes: <u>No:X</u> N/A: <u>Unknown</u>	Electric wiring removed from site? Yes: <u>No:</u> N/A: <u>X</u> Unknown: <u>No:</u>
Hole filled with sand		Borehole refilled? Yes: <u>X</u> No: <u>No:X</u>	Attached an original well log? Yes: <u>No:X</u> N/A: <u>Unknown</u>
Asphalt contoured to parking lot		Screened area filled with gravel? Yes: <u>No:X</u> N/A: <u>Unknown</u>	Well log listed at DNR? Yes: <u>No:</u> N/A: <u>Unknown</u>
	Excavation Depth (ft)? <u>36.78</u>	Perforated area filled with gravel? Yes: <u>No:</u> N/A: <u>X</u> Unknown: <u>No:</u>	Local authorities notified? Yes: <u>X</u> No: <u>No:</u> N/A: <u>Unknown</u>
	Type of fill used? <u>bentonite</u>	Excavated pit refilled? Yes: <u>X</u> No: <u>No:</u> N/A: <u>Unknown</u>	DEC notified of decommissioning? Yes: <u>X</u> No: <u>No:</u> N/A: <u>Unknown</u>
	Volume of fill (cu ft)? <u>~ 0.82</u>	Pit area mounded? Yes: <u>No:</u> N/A: <u>Unknown</u>	DNR notified of decommissioning? Yes: <u>X</u> No: <u>No:X</u> N/A: <u>Unknown</u>
	# Bags of bentonite in casing? <u>~ 1 bag</u>		

Signatures (\*\*\*) => are required )X

Owner***: <u>James Kiernan</u>	Decommissioner / Contractor***: <u>Evan Wujcik</u>
Date: <u>9 / 1 / 20</u>	Date: <u>07 / 23 / 2020</u>

- 1) Deliver this form to DNR and DEC within 45 days of decommissioning, as per state regulations 11 AAC 95.240.
- 2) Attach an original water well log, if available. A blank water well log form is available for use if the lithology and well construction details are known but the original water well log is missing.
- 3) Attach any maintenance or water usage records that may apply to this well and provide an adequate locational description, including maps or sketches. Use additional pages as needed.
- 4) This form is under development and is subject to change. Please submit suggestions for changes or improvements to either DNR or DEC at the addresses listed above.

Please attach schematics and photos to further document the information provided on this form. This is particularly important for public water supply wells and also any other wells that might impact the public water supply.

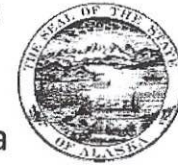


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### Well Record of Decommissioning

This form is intended to convey information regarding the decommissioning of a water well as required by both DEC and DNR. Add additional datasheets as necessary.

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Name: <u>Evan Wujcik</u>	Owner's name and address: <u>Chevron Environmental Management Company / 6001 Bollinger Canyon Road, Room C2101, San Ramon, California 94583</u>
Company: <u>Arcadis</u>	Well location - Street & number: <u>442 Gambell St Anchorage, AK</u>
Address: <u>880 H Street, Suite 101, Anchorage, AK 99501</u>	Well location - Subdivision, Lot & Block: _____
Phone: <u>814-392-0040</u>	Meridian: _____ Township: _____ Range: _____ Section: _____ Quarters: _____
Email: <u>Evan.Wujcik@arcadis.com</u>	GPS (to 5 places): Latitude: <u>61.217893</u> Longitude: <u>-149.871377</u> Datum: _____
	Well Name or Number: <u>MW-8</u>

Please check all boxes that apply and provide all requested information. Do not check boxes that do not apply. \* Note, Do not enter locational information for public water supplies - see note \*\*, below.

Details of Former Well	Former Well Description (Not required if original well log attached).	
Public water system? (See note **) Yes: <u>No:X</u>	Original Driller's Name: <u>unknown</u>	Well depth (ft bls): <u>43.0</u>
If so, PWSID number: _____	Well Type	Date of completion: <u>7 / 23 / 2020</u>
Single Family Domestic? Yes: <u>No:X</u>	Drilled? Yes: <u>X</u> No: <u>No:X</u>	Flowing artesian? Yes: <u>No:X</u> N/A Unknown
Commercial/ Fishery? Yes: <u>No:X</u>	Driven? Yes: <u>No:X</u>	Flood prone site? Yes: <u>No:X</u> N/A Unknown
Irrigation/Agricultural? Yes: <u>No:X</u>	Jetted? Yes: <u>No:X</u>	Well condition? Good: <u>X</u> Poor: <u>No:X</u> N/A Unknown
Heating / Cooling? Yes: <u>No:X</u>	Dug? Yes: <u>No:X</u>	Grouted? Yes: <u>No:X</u> N/A Unknown
	Unknown? Yes: <u>No:X</u>	Well house? Yes: <u>No:X</u> N/A Unknown
	Finish	Static water (ft bls): <u>37.09</u>
	Cased? Yes: <u>X</u> No: <u>No:X</u>	Bedrock (ft bls): _____
	Capped? Yes: <u>X</u> No: <u>No:X</u>	Casing type: <u>PVC</u>
	Screened? Yes: <u>X</u> No: <u>No:X</u>	Diameter (inches): <u>2</u>
	Perforated? Yes: <u>No:X</u> N/A Unknown	Stickup (ft): <u>NA</u>
	Well liner present? Yes: <u>No:X</u> N/A Unknown	

\*\* Public Water System decommissioning may require additional documentation, please contact DEC in this regard.

Decommissioning notes:	Reason for well decommissioning:	Decommissioning process	
Include notes regarding any deviations from state approved methods of decommissioning the well.	Preparation for site closure	Casing cut below grade? Yes: <u>No:X</u> N/A Unknown	Well disinfected prior to decommissioning? Yes: <u>No:X</u> N/A Unknown
Well casing removed and used as tremie pipe		Casing fully removed? Yes: <u>X</u> No: <u>No:X</u>	Plumbing removed from casing? Yes: <u>No:</u> N/A Unknown
Bentonite chips filled into casing hole	Excavation and Fill Details	Casing filled w/ bentonite? Yes: <u>No:X</u> N/A Unknown	Liner (if any) removed? Yes: <u>No:</u> N/A Unknown
Well lid and monument vault removed		Casing welded closed? Yes: <u>No:X</u> N/A Unknown	Electric wiring removed from site? Yes: <u>No:</u> N/A Unknown
Hole filled with sand		Borehole refilled? Yes: <u>X</u> No: <u>No:X</u>	Attached an original well log? Yes: <u>X</u> No: <u>No:</u> N/A Unknown
Asphalt contoured to parking lot		Screened area filled with gravel? Yes: <u>No:X</u> N/A Unknown	Well log listed at DNR? Yes: <u>No:</u> N/A Unknown
	Type of fill used? <u>bentonite</u>	Perforated area filled with gravel? Yes: <u>No:</u> N/A Unknown	Local authorities notified? Yes: <u>X</u> No: <u>No:</u> N/A Unknown
	Volume of fill (cu ft)? <u>~ 0.81</u>	Excavated pit refilled? Yes: <u>X</u> No: <u>No:</u> N/A Unknown	DEC notified of decommissioning? Yes: <u>X</u> No: <u>No:</u> N/A Unknown
	# Bags of bentonite in casing? <u>~ 1.5 bags</u>	Pit area mounded? Yes: <u>No:X</u> N/A Unknown	DNR notified of decommissioning? Yes: <u>No:X</u> N/A Unknown

#### Signatures ( \*\* = are required )

Owner\*\*\*: James Kiernan

 OBO CEMC

Date: 9 / 1 / 20

Decommissioner / Contractor\*\*\*: Evan Wujcik

Date: 07 / 23 / 2020

- 1) Deliver this form to DNR and DEC within 45 days of decommissioning, as per state regulations 11 AAC 93.140.
- 2) Attach an original water well log, if available. A blank water well log form is available for use if the lithology and well construction details are known but the original water well log is missing.
- 3) Attach any maintenance or water usage records that may apply to this well and provide an adequate locational description, including maps or sketches. Use additional pages as needed.
- 4) This form is under development and is subject to change. Please submit suggestions for changes or improvements to either DNR or DEC at the addresses listed above.

Please attach schematics and photos to further document the information provided on this form. This is particularly important for public water supply wells and also any other wells that might impact the public water supply.

Former Unocal Service Station No. 5580  
447 Gambell Street  
Anchorage, Alaska

Date Started : 12/2/04  
Date Completed : 12/2/04  
Drilling Method : Hollow stem auger  
Boring Diameter : 8"  
Casing Diameter : 2"

Sampling Method : Split spoon SPT  
Northing : 2637330.47  
Easting : 523059.02  
Logged By : Dave Brailey

Depth in Feet	Surf. Elev. 99.95	USCS	GRAPHIC	DESCRIPTION	Sample	Blow Counts per 6"	PID, ppmV	Benzene, mg/Kg	GRO, mg/Kg	DRO, mg/Kg	Well: MW-8 Elev.: 99.45
0											
5	95	SW		Brown GRAVELLY SAND with less than 5% fines, slightly moist, medium dense, no odor.	☒	10 11	1.0				
10	90			Brown GRAVELLY SAND with less than 5% fines, slightly moist, dense, no odor.	☒	13 14	1.1				
15	85			Brown GRAVELLY SAND as above	☒	7 8	1.0				
		SP		Brown SAND, fine to medium grained, well sorted. Moist, medium dense, no odor.	☒						
20	80			Brown GRAVELLY SAND with less than 5% fines, 3-inch well sorted sand layer at 21.2'. Moist, dense, no odor	☒	9 10 11	1.1				
25	75	SW		Brown GRAVELLY SAND, less than 5% fines, gravel increasing downward from 15% at top to 30% at bottom. Moist, dense, no odor.	☒	8 12 14	2.8				
30	70			Brown SAND, medium to coarse grained, with 10-15% gravel, 5% fines. Moist, dense, no odor	☒	8 11 13	5.4	ND(0.012)	5.85	47.8	
35	65			Brown SAND, fine to medium grained, well sorted, moist, dense, no odor.	☒		1.0				
40	60	SP		Brown SAND, fine to medium grained, well sorted, wet, dense, no odor.	☒	8 13 14	1.1	ND(0.010)	ND(2.0)	ND(28)	
55						8 10 14					

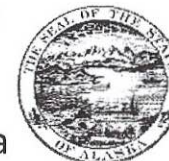


Department of Natural Resources  
 Division of Mining, Land & Water  
 550 w 7th Ave., Suite 1020  
 Anchorage, AK 99501-3562  
 dnr.water.reports@alaska.gov



Department of Environmental Conservation  
 Division of Environmental Health, Drinking Water Program  
 555 Cordova Street  
 Anchorage, AK 99501  
 dec.eh.drinkingwater.reports@alaska.gov

State  
 of  
 Alaska



### Well Record of Decommissioning

This form is intended to convey information regarding the decommissioning of a water well as required by both DEC and DNR. Add additional datasheets as necessary.

Well Decommissioner or Contractor	Well and Owner Particulars *
Name: Evan Wujcik	Owner's name and address: Chevron Environmental Management Company / 6001 Bollinger Canyon Road, Room C2101, San Ramon, California 94583
Company: Arcadis	Well location - Street & number: 442 Gambell St Anchorage, AK
Address: 880 H Street, Suite 101, Anchorage, AK 99501	Well location - Subdivision, Lot & Block:
Phone: 814-392-0040	Meridian: _____ Township: _____ Range: _____ Section: _____ Quarters: _____
Email: Evan.Wujcik@arcadis.com	GPS (to 5 places): Latitude: 61.217793 Longitude: -149.871616 Datum: _____
	Well Name or Number: MW-9

Please check all boxes that apply and provide all requested information. Do not check boxes that do not apply. \* Note, Do not enter locational information for public water supplies - see note \*\*, below.

Details of Former Well	Former Well Description (Not required if original well log attached).	
Public water system? (See note **) Yes: <b>No:X</b>	Original Driller's Name: unknown	Well depth (ft bls): 44.8
If so, PWSID number: _____	Well Type	Static water (ft bls): 36.85
Single Family Domestic,? Yes: <b>No:X</b>	Drilled? <b>Yes:X</b> No: <b>No:X</b>	Bedrock (ft bls): _____
Commercial/ Fishery? Yes: <b>No:X</b>	Driven? Yes: <b>No:X</b>	Casing type: PVC
Irrigation/Agricultural? Yes: <b>No:X</b>	Jetted? Yes: <b>No:X</b>	Diameter (inches): 2
Heating / Cooling? Yes: <b>No:X</b>	Dug? Yes: <b>No:X</b>	Stickup (ft): NA
	Unknown? Yes: <b>No:X</b>	Well condition? <b>Good:X</b> Poor: <b>No:X</b> N/A Unknown
		Grouted? Yes: <b>No:X</b> N/A Unknown
		Well house? Yes: <b>No:X</b> N/A Unknown

\*\* Public Water System decommissioning may require additional documentation, please contact DEC in this regard.

Decommissioning notes:	Reason for well decommissioning:	Decommissioning process
Include notes regarding any deviations from state approved methods of decommissioning the well.	Preparation for site closure	Casing cut below grade? <b>Yes:X</b> No: <b>No:X</b> N/A Unknown
Well casing broken at 5 ft bloc		Casing fully removed? Yes: <b>No:X</b> N/A Unknown
Well casing screen filled with sand (1 bag)	Excavation and Fill Details	Casing filled w/ bentonite? <b>Yes:X</b> No: <b>No:X</b> N/A Unknown
Bentonite chips filled into remaining casing		Casing welded closed? Yes: <b>No:X</b> N/A Unknown
Well lid and monument vault removed		Borehole refilled? <b>Yes:X</b> No: <b>No:X</b> N/A Unknown
Hole filled with sand		Screened area filled with gravel? <b>Yes:X</b> No: <b>No:X</b> N/A Unknown
Asphalt contoured to parking lot	Volume of fill (cu ft)? ~ 0.80	Perforated area filled with gravel? Yes: <b>No:X</b> N/A Unknown
	# Bags of bentonite in casing? ~ 1.25 bags	Excavated pit refilled? <b>Yes:X</b> No: <b>No:X</b> N/A Unknown
		Pit area mounded? Yes: <b>No:X</b> N/A Unknown
		Well disinfected prior to decommissioning? Yes: <b>No:X</b> N/A Unknown
		Plumbing removed from casing? Yes: <b>No:X</b> N/A Unknown
		Liner (if any) removed? Yes: <b>No:X</b> N/A Unknown
		Electric wiring removed from site? Yes: <b>No:X</b> N/A Unknown
		Attached an original well log? <b>Yes:X</b> No: <b>No:X</b> N/A Unknown
		Well log listed at DNR? Yes: <b>No:X</b> N/A Unknown
		Local authorities notified? <b>Yes:X</b> No: <b>No:X</b> N/A Unknown
		DEC notified of decommissioning? <b>Yes:X</b> No: <b>No:X</b> N/A Unknown
		DNR notified of decommissioning? <b>Yes:</b> No: <b>No:X</b> N/A Unknown

Signatures ( \*\*\* => are required )

Owner\*\*\*: James Kiernan

*[Signature]* OBO CEMC

Date: 9 / 1 / 20

Decommissioner / Contractor\*\*\*: Evan Wujcik

*[Signature]*

Date: 07 / 23 / 2020

- 1) Deliver this form to DNR and DEC within 45 days of decommissioning, as per state regulations 11 AAC 93.140.
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Please attach schematics and photos to further document the information provided on this form. This is particularly important for public water supply wells and also any other wells that might impact the public water supply.



# STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Former Unocal Station 5580 - Cline's Tesoro  
 PROJECT NUMBER: 621048  
 CLIENT: Chevron Environmental Management Company  
 LOCATION: 442 Gambell Street, Anchorage, Alaska  
 DRILLER: Discovery Drilling (Tim Beckner)

HOLE DESIGNATION: CB10-4/MW-9  
 DATE COMPLETED: July 14, 2010  
 DRILLING METHOD: Vacuum Truck/Hollow-Stem Auger  
 FIELD PERSONNEL: Siobhan Pritchard

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	WELL CONSTRUCTION	SAMPLE				
				DEPTH (ft)	INTERVAL	REC (ft)	PP (tsf)	PID (ppm)
0.50	<b>Asphalt</b>	0.50	Flush Mount Well Vault Concrete					
2	<b>SAND with gravel and cobbles:</b> fine to medium grained, subangular to subrounded sand; subangular to subrounded gravel; light brown, moist.							
4					AK	8.0		6.2
8		8.00						
10	<b>SAND with gravel:</b> fine to medium grained, subangular to subrounded sand; subangular to subrounded gravel; light brown, moist.	10.00						
12		12.00						
15	<b>SAND with gravel:</b> medium grained, subangular to subrounded sand; subangular to subrounded gravel; olive gray, moist.	15.00						
16		17.00						
20	<b>SAND with gravel:</b> medium grained, subangular to subrounded sand; subangular to subrounded gravel; olive gray, moist.	20.00						
22		22.00						
25	<b>SAND with gravel:</b> fine to medium grained, subangular to subrounded sand; subangular to subrounded gravel; olive gray, moist.	25.00						
26		27.00						
28								

**NOTES:** Cleared to 8 fbg with vaccum rig  
 WATER FOUND ∇ 7/14/2010  
 LABORATORY ANALYSIS ○

OVERBURDEN LOG 621048.GPJ CRA\_CORP.GDT 4/6/11

This log should not be used separately from the original report.





# STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Former Unocal Station 5580 - Cline's Tesoro  
 PROJECT NUMBER: 621048  
 CLIENT: Chevron Environmental Management Company  
 LOCATION: 442 Gambell Street, Anchorage, Alaska  
 DRILLER: Discovery Drilling (Tim Beckner)

HOLE DESIGNATION: CB10-4/MW-9  
 DATE COMPLETED: July 14, 2010  
 DRILLING METHOD: Vacuum Truck/Hollow-Stem Auger  
 FIELD PERSONNEL: Siobhan Pritchard

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	WELL CONSTRUCTION	SAMPLE				
				DEPTH (ft)	INTERVAL	REC (ft)	PP (tsf)	PID (ppm)
32	<b>SAND</b> fine grained, subangular to subrounded, brown, moist.	30.00		2.0	X			11.8
34		32.00		3.0	█			
36	<b>SAND</b> fine grained, subangular to subrounded, brown, moist.	35.00		2.0	X			9.9
38		37.00		3.0	█			
40	<b>SAND</b> fine grained, subangular to subrounded, brown, wet.	40.00		2.0	X			2.2
42		42.00		3.0	█			
44	<b>SAND</b> fine grained, subangular to subrounded, brown, moist.	45.00		2.0	X			0.5
46		47.00		2.0	X			
48	END OF BOREHOLE @ 47.0ft BGS	47.00						

10/20 Silica Sand  
 2" Diameter  
 0.02 Slotted  
 Screen

**NOTES:** Cleared to 8 fbg with vaccum rig  
 WATER FOUND ∇ 7/14/2010  
 LABORATORY ANALYSIS ○

OVERBURDEN LOG 621048.GPJ CRA\_CORP.GDT 4/6/11

# Attachment B

## Utility Locate and Well Abandonment Field Notes




# Daily Log

**Project Name :** 306451 **Weather(°F) :** Rainy  
**Project Number :** 30045551 **Prepared By:** Evan Wujcik  
**Purpose :** Utility locate for well decommissioning  
**PPE :** Level D  
**Equipment:** --

Date	Time	Description of Activities
07/21/2020	07:00	Arrive on site Open permit to work Complete health and safety and tailgate meeting Review HASP
07/21/2020	07:45	Complete site walk Prepare equipment for utility locate
07/21/2020	08:00	Check in with attendant
07/21/2020	09:00	Mark out 5 x 5 ft grid around each well Complete initial marking of utilities Prepare for GPR locate
07/21/2020	11:00	Complete GPR locate within each 5 x 5 ft grid on each well to be decommissioned Additional utilities marked out Discussed GPR and other locate findings Each well to be decommissioned deemed safe from utilities
07/21/2020	11:15	Completed utility locate fulcrum report Marked up site map with public utilities and anomalies found by Geotech
07/21/2020	11:30	Close permit to work Subcontractor mobilized offsite Arcadis Employee mobilize to office

**Signature:**



<b>Waste Management:</b>										
Drums On Site										
Date	Are there any waste drums on site?	Number of Drums upon Arrival	Size of Drums	Type of Drums	Condition of Drums	Waste Drummed Today?	Number of drums Created	Size of drums	Condition of Drums	General Waste Comments
07/21/2020	no					no				

# Daily Log

**Project Name :** 306451 **Weather(°F) :** Clear  
**Project Number :** 30045551 **Prepared By:** Evan Wujcik  
**Purpose :** Well decommissioning  
**PPE :** Level D  
**Equipment:** Water Level Meter (WLM)

Date	Time	Description of Activities
07/23/2020	06:45	Arcadis employee arrive on site Open permit to work Locate an open Wells to be decommissioned
07/23/2020	07:00	Subcontractor arrived on site Completed health and safety and tailgate meeting Review HASP
07/23/2020	07:30	Complete site walk Prepared drill rig
07/23/2020	07:45	Gauge all wells to be decommissioned
07/23/2020	08:00	Start well decommissioning at MW8 Drill rig brought over to well Set a proper delineation zone Well casing removed Well casing void filled with bentonite Well vault in monument removed Well Vault avoid filled with sand Asphalt contoured to surface
07/23/2020	08:45	Start well decommissioning at MW3 Drill rig brought over to well Set a proper delineation zone Well casing sunk Subcontractor still able to dig out well casing to pull it out Well casing removed Well casing void filled with bentonite Well vault in monument removed Well Vault avoid filled with sand Asphalt contoured to surface
07/23/2020	09:30	Start well decommissioning at MW2 Drill rig brought over to well Set a proper delineation zone Well casing removed Well casing void filled with bentonite Well vault in monument removed Well Vault avoid filled with sand Asphalt contoured to surface
07/23/2020	10:15	Start well decommissioning at MW1 Drill rig brought over to well Set a proper delineation zone Well casing removed Well casing void filled with bentonite Well vault in monument removed Well Vault avoid filled with sand Asphalt contoured to surface

# Daily Log

07/23/2020	11:00	Start well decommissioning at MW9 Drill rig brought over to well Set a proper delineation zone Well casing removal attempted Stop work to call PM to confirm how to proceed in compliance with ADEC Well casing broke at 5 ft btoc, this section was removed Well screen in well casing filled with sand Remaining well casing filled with bentonite Well monument removed Well vault skirt remained in ground due to potential reconstruction issues if removed Well Vault filled with sand Asphalt contoured to surface
07/23/2020	12:00	Subcontractor load vehicle Close permit to work
07/23/2020	12:30	Subcontractor mobilized offsite Arcadis employee mobilized to office

Signature:



**Waste Management:**

Drums On Site										
Date	Are there any waste drums on site?	Number of Drums upon Arrival	Size of Drums	Type of Drums	Condition of Drums	Waste Drummed Today?	Number of drums Created	Size of drums	Condition of Drums	General Waste Comments
07/23/2020	no					no				

**Equipment and Calibration Information:**

Supplier: Pine

Model:

Rental Number:

Calibrated: yes

Bump Checked: no

Calibration Passed: yes

**PIDSN:**

Date	Time	Calibrated Fluid and Value	Lot #	Expiration Date	Initial Reading	Final Reading
07/23/2020	--					