

BEFORE THE OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF COLORADO

IN THE MATTER OF ALLEGED VIOLATIONS OF THE	)	CAUSE NO. 1V
RULES AND REGULATIONS OF THE COLORADO OIL	)	
AND GAS CONSERVATION COMMISSION BY OXY	)	ORDER NO. 1V-346
USA WTP LP, GARFIELD COUNTY, COLORADO	)	

**ADMINISTRATIVE ORDER BY CONSENT**

(Pursuant to Rule 522.b.(3) of the Rules and Regulations of the  
Colorado Oil and Gas Conservation Commission, 2 CCR 404-1)

**FINDINGS**

1. On August 24, 1994, the Director (“Director”) of the Colorado Oil and Gas Conservation Commission (“Commission” or “COGCC”) approved an Application for Permit-to-Drill (“APD”), Form 2, for the Cascade Creek #605-1 Well ( the “Well”) (API No. 05-045-06897) located in the SE¼ NW¼ of Section 5, Township 6 South, Range 97 West, 6<sup>th</sup> P.M. (refer to Attachment 1), submitted by OXY USA Inc., Operator #66561. Subsequently, OXY USA Inc. submitted a re-filing of the APD, and on August 3, 1998, the COGCC Director approved the re-filing.

2. On August 21, 1998, OXY USA Inc. spud the Well and completed it on October 25, 1998. The Well was operated for the past several years by the respondent herein, OXY USA WTP LP, Operator #66572 (hereinafter referred to as “OXY”).

3. Water produced in association with hydrocarbons (“produced water”) from the Well was placed in a lined pit located on the Well pad – the pit was placed into operation at or around the date of completion (October 25, 1998) and was approximately 20 feet square and eight feet deep, yielding a capacity of approximately 400 barrels with two feet of freeboard. The pit on the Well pad was used as a production pit from the date of well completion until at or around OXY’s discovery of the release at issue in this matter (June 17, 2008), about which time a torn liner was identified (refer to Attachment 2). Before constructing the pit or discharging produced water into it, OXY did not submit a sensitive area determination to evaluate the potential for ground water impacts, but a liner was installed in the pit.

a. Pre-April 1, 2009 rules (2 CCR 404-1, “Rules” or individually, “Rule”), that were in effect when the production pit on the Well pad was constructed, required operators of production pits “to make a sensitive area determination . . . to evaluate the potential for impact to ground water and submit [the] data evaluated and analysis used in the determination to the Director” (former Rule 901.e.(2)). The submittal of this information to the Director allowed the COGCC to evaluate whether a proposed production pit would be sited in an area vulnerable to groundwater impact, and, if so, whether special precautions were needed to avoid such an impact.

b. The Rules further required production pits in sensitive areas to be permitted before construction (former Rule 903.a.(1)B.).

c. During this period of time the Rules defined sensitive area as “an area vulnerable to potential significant adverse groundwater impacts, due to factors such as the presence of shallow economically usable groundwater or pathways for communication with deeper economically usable groundwater; proximity to surface water, including lakes, rivers, perennial or intermittent streams, creeks, irrigation canals, and wetlands.” 100-Series Rules.

d. The production pit on the Well pad was located in an area vulnerable to potential significant adverse ground water impacts, and therefore it was located in a sensitive area based on the following criteria:

- i. The production pit was located in close proximity (approximately 270 feet) to Rock Springs, and Rock Springs is the source of water for an unnamed tributary to Crystal Creek, which is a perennial stream (refer to Attachment 3).
- ii. Shallow groundwater was impacted by a release of produced water and condensate from a pit, which indicates that pathways for communication between the ground surface and groundwater exist.

iii. The water discharged at Rock Springs is shallow economically usable groundwater, which was used by ranchers for watering livestock and by wildlife.

e. The permitting of pits is an essential component of the COGCC regulatory scheme to ensure best management practices are used by operators to protect public health, safety, and welfare and the environment, including soil, waters of the state, and wildlife, from significant adverse environmental, public health, or welfare impacts from E&P waste. Although this pit was lined, if it had been properly maintained, releases of produced water and condensate would have been far less likely to occur and the risk of impacts to ground water would have been greatly reduced.

4. On June 16, 2008, a rancher who leases grazing land from OXY, notified OXY of a potential impact to two springs ("Rock Springs") in close proximity to the Well pad. The rancher noticed that the water discharging from Rock Springs had, what he described as, a "sulfuric" odor. OXY personnel inspected the springs in the evening of June 16, 2008, but they were unable to collect water samples because of darkness.

5. Rock Springs is located in Section 5, Township 6 South, Range 97 West, 6<sup>th</sup> P.M., approximately 270 feet southwest and 20 feet below the location of the former lined production pit on the Well pad. At Rock Springs water discharges at two locations, referred to by OXY as the North and South Springs (refer to Attachment 4). The spring waters discharge into a small pond that, in turn, discharges into an unnamed tributary. The unnamed tributary joins Crystal Creek in Section 6, Township 6 South, Range 97 West, 6<sup>th</sup> P.M., and Crystal Creek joins Deer Park Gulch in Section 12, Township 6 South, Range 98 West, 6<sup>th</sup> P.M.

All of Section 6 has been designated as sensitive wildlife habitat by the Colorado Division of Wildlife for the benefit of the greater sage grouse.

6. On June 17, 2008, OXY had water samples collected from the North Spring and surface water in the unnamed tributary of Crystal Creek and submitted them for laboratory analyses.

7. On June 19, 2008, OXY had water samples collected from the North Spring and surface water in the unnamed tributary of Crystal Creek and submitted them for laboratory analyses. OXY attempted to isolate waters from the North Spring from the unnamed tributary of Crystal Creek by installing a series of soil filled bastions referred to by OXY as the North Spring dam, which detained waters discharging from the North Spring (refer to Attachments 4, 5, and 6).

8. On June 20, 2008, OXY began pumping water from the North Spring impoundment into an above-ground storage tank (frac tank) (refer to Attachment 5).

9. On June 21, 2008, OXY observed what appeared to be an oily sheen (refer to Attachment 7, as photographed by COGCC Staff on June 25, 2008) on the surface of the water discharging from the South Spring; whereupon, OXY collected a water sample for laboratory analysis. OXY attempted to isolate South Spring from the unnamed tributary of Crystal Creek by installing a series of soil filled bastions referred to by OXY as the South Spring dam which detained waters discharging from the South Spring (refer to Attachment 4).

10. On June 23, 2008, OXY observed a sheen on the water in the unnamed tributary of Crystal Creek; whereupon, OXY installed a third series of soil filled bastions, referred to by OXY as the Lower Pit, below both North and South Springs (refer to Attachment 4). Water was removed from this impoundment and pumped to the frac tank on the Well pad. To maintain flow and to avoid additional potential surface water contamination in the unnamed tributary of Crystal Creek, flow upstream from Rock Springs was captured and diverted above Rock Springs and rerouted through a 6-inch pipe around the North and South Springs and released back to the unnamed tributary below the Lower Pit. OXY installed fencing around Rock Springs and the retention ponds to prevent access by livestock and wildlife to the water.

11. On June 23, 2008, OXY received the analytical results indicating that ground water discharging from Rock Springs was impacted by hydrocarbon compounds at concentrations exceeding the COGCC Table 910-1 (as existing at the time of discharge) concentration for benzene. A summary of the analytical results is presented below:

Date	Location	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	GRO (µg/L)
	Table 910-1 Concentration <sup>1</sup>	5	1000	700	1,400 - 10,000	N/A
6/17/08	North Spring	17	4.4	1.2	220	2,000
6/19/08	North Spring	1	92	Below Detection	Below Detection	500

<sup>1</sup> Concentrations taken from the Colorado Department of Public Health and Environment – Water Quality Control Commission (“CDPHE-WQCC”) Regulation 41 - The Basic Standards for Ground Water as existed at the time of discharge on or about June 2008. “Gasoline range organic compounds” is represented by GRO.

12. On June 24, 2008 OXY verbally reported the release to the COGCC (COGCC Spill Tracking No. 200220400).

13. On June 24, 2008, OXY had additional water samples collected for laboratory analysis from the North and South Springs, and the surface water in the unnamed tributary of Crystal Creek at locations both upstream and downstream of the springs. Analytical results indicated that ground water discharging from Rock Springs was impacted by hydrocarbon compounds at concentrations exceeding the COGCC Table 910-1 concentration for benzene. It should be noted that the South Spring tested at a level more than 12 times the allowable level for benzene. Concentrations of these constituents subsequently decreased due to OXY’s remediation activities and natural attenuation. A summary of the analytical results is presented below:

Date	Location	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	GRO (µg/L)
	Table 910-1 Concentration <sup>1</sup>	5	1000	700	1,400 - 10,000	N/A
6/24/08	Upstream	Below Detection	Below Detection	Below Detection	Below Detection	Below Detection
6/24/08	North Spring	36	Below Detection	8.4	1.5	2,000
6/24/08	South Spring	64	28	2.3	0.9	2,800
6/24/08	Downstream	3.2	Below Detection	Below Detection	1.9	230

<sup>1</sup> Concentrations taken from CDPHE-WQCC Regulation 41 - The Basic Standards for Ground Water as existed at the time of discharge on or about June 2008

14. On June 25, 2008, OXY conducted a stakeholder’s meeting which included local ranchers, COGCC Staff, and OXY Staff.

15. On June 25, 2008, COGCC Staff inspected the impacted springs, surface water, the Well pad and production pit. It was observed that, although the pit was lined, the liner was torn in several places (refer to Attachment 2).

16. On June 25, 2008, OXY initiated a tracer study as a method to estimate the amount of time it would take water to travel from the pit on the Well pad to Rock Springs. Uranine 2313 Yellow dye was placed in the production pit at 2:00 p.m., and dye appeared in the South Spring within 24 hours and in the North Spring within six (6) days. The results of the tracer study indicated that the pit on the Well pad is hydraulically connected to Rock Springs (both the South and North Springs) and that the travel time is approximately 43 to 260 feet per day (or 15,000 to 90,000 X 10<sup>-6</sup> cm/second) under the hydrologic conditions that existed at the time of the test. The observed flow velocities suggest preferential flow through naturally fractured bedrock versus diffuse matrix flow.

17. As was required by former Rule 901.e.(4) for the management and remediation of remediation of certain spills and releases, in its *Site Investigation and Remediation Workplan* submitted in response to the NOAV in this matter (see Finding No. 21), OXY conducted a sensitive area determination utilizing the sensitive area decision tree (Figure 901-1) and determined that the Well pad is situated on and around a “sensitive area”. OXY’s analysis showed that the release or releases at issue have chemistry that exceeds some criteria found in Box 1. The production pit on the Well pad is underlain by a recharge zone for an unconfined aquifer as is evidenced by the contaminant ground water (Box 2), and has a hydraulic conductivity that exceeds 10<sup>-6</sup> cm/second (Box 3). The area is not within a known area classified for domestic use by the CDPHE-WQCC or a local wellhead protection area (Box 4). There are no known domestic water wells within ½-mile or public water supply wells within ¼-mile of the release point (Box 5). The depth to average high ground water from the base of the pit may be less than 20 feet and the release impacted ground water as is evidenced by the release of hydrocarbons into the intermittent drainage (Box 6).

18. On June 26, 2008, COGCC Staff issued OXY a Notice of Alleged Violation (“NOAV”) #200191518 for its operations at the Well pad which impacted waters at the Rock Springs. The NOAV cited violations of the following COGCC rules:

a. Rule 209., which requires operators to exercise due care in the protection of coal seams and water-bearing formations, with special precautions taken in drilling wells to guard against any loss of artesian water from the stratum in which it occurs and the contamination of fresh water by objectionable water, oil, or gas;

b. Rule 324A.a., which requires operators to take precautions to prevent significant adverse environmental impacts to air, water, soil, or biological resources to the extent necessary to protect public health, safety and welfare and to prevent the unauthorized discharge of gas;

c. Rule 324A.b., which provides that no operator, in the conduct of any oil or gas operation shall perform any act or practice which shall constitute a violation of water quality standards or classifications established by CDPHE-WQCC for waters of the state;

d. Rule 902.a., which required at the time of the discharge that a pit used for E&P shall be constructed and operated to protect waters of the state from significant adverse environmental impacts from E&P waste;

e. Rule 906.a., which provided at the time of the discharge that spills/releases of E&P waste, including produced fluids, shall be controlled and contained immediately upon discovery, and that impacts resulting from spills/releases shall be investigated and cleaned up as soon as practicable;

f. Rule 906.b.(3), which provided at the time of the discharge that spills/releases of any size which impact or threaten to impact any waters of the state shall be verbally reported to the COGCC Director as soon as practicable after discovery;

g. Rule 907.a.(1), which provided at the time of the discharge that operators shall ensure that E&P waste is properly stored, handled, transported, treated, recycled, or disposed to prevent threatened or actual significant adverse environmental impacts to air, water, soil or biological resources or to the extent necessary to ensure compliance with allowable concentration levels in Table 910-1, with consideration to WQCC ground water standards and classifications; and

h. Rule 907.a.(2), which requires that E&P waste management activities shall be conducted, and facilities constructed and operated, to protect the waters of the state from significant adverse environmental impacts from E&P waste.

Said NOAV required OXY, by July 14, 2008, to provide written descriptions of: (1) any pits constructed or used on the Well pad, including size, volume, whether or not the pit was lined, (2) all fluids (water, drilling, completion, and frac fluids, flowback, etc.) placed in the pit, including volumes, dates, etc., and provide haul tickets for all fluids brought from offsite to the pit(s), (3) whether condensate was observed in the pit(s) during flowback or completion; and (4) tanks or other containers that were used at this site to manage fluids and any spills/releases that occurred. Further, OXY was to submit: (1) a Form 27, *Site Investigation and Remediation Workplan*, for COGCC review, and (2) all analytical data collected to date. OXY was also to consult with COGCC and mitigate impacts to the springs, including, (1) fencing impacted surface water to restrict access by livestock and wildlife, and (2) providing a supply of water for livestock.

19. COGCC records reveal that the pit was never permitted for use as a production pit (nor was application made by OXY to permit said pit); consequently, OXY used the pit on the Well pad to manage produced water from on or around the date of well completion (October 25, 1998) through the date the release was discovered (June 17, 2008), a period of 3,523 days, without an approved Form 15 pit permit, as required by Rule 903.a. (formerly Rule 903.a.(1)B.).

20. On July 10, 2008, OXY requested, and was granted, an extension to the NOAV abatement deadline, recited in Finding No. 18, from July 14, 2008 until July 18, 2008 for submittal of the required information.

21. On July 18, 2008, OXY submitted a Form 27, *Site Investigation and Remediation Workplan* (a.k.a., COGCC Remediation Project No. 4622) to the COGCC. Said workplan, in part, provided the following information:

- a. A description of OXY emergency response operations which were implemented in responding to the discovery of the release;
- b. A description of how OXY proposed to remediate the impacts of the release;
- c. A description of OXY's plan to monitor the impacted media (both ground and surface waters);
- d. OXY's proposal to reclaim impacts caused by construction activities associated with its response to, and investigation of, the release; and
- e. A description of how OXY managed and disposed of the impacted media (both ground and surface waters) from the release.

In addition, analytical reports for samples collected during the emergency response phase of the OXY investigation and remediation were provided. OXY had submitted its final response to the NOAV and completed all corrective actions to the COGCC Staff's satisfaction, including the completion of fence construction and acceptable livestock water supply mitigation prior to the abatement deadline.

22. On January 14, 2009, OXY submitted its *Release Characterization and Interim Remedial Action Workplan* for the Well pad, which contained the results of its initial assessment of the conditions at the site, descriptions and assessments of the corrective actions taken, a description of its additional site characterization activities conducted during the summer and fall of 2008, and its ongoing corrective actions and monitoring at the site.

23. OXY constructed a new lined produced water pit, approximately 100 feet long, 60 feet wide, and 10 feet deep (refer to Attachment 4), and submitted a Form 15 Pit Permit to the COGCC on September 10, 2008; said pit was not used as a production pit because OXY was awaiting approval from the COGCC on the pit permit. In late 2008, OXY changed its policy so that production pits would not be used for primary or emergency storage of produced water, and, on March 10, 2009, requested that its permit application for the new lined pit be withdrawn. OXY closed the unused lined pit.

24. Although OXY could not provide information as to when the pit liner was torn and produced water and associated condensate were released from the pit, or the volume of produced water and associated condensate that were released from the pit, or the date on which it discontinued the use of the pit to manage produced water, the rancher, who leased grazing land from OXY, indicated that he did not observe contamination during any of his visits to Rock Springs during 2007, the last of which occurred during late November 2007. Therefore, it is reasonable to conclude that the release of condensate and produced water from the pit on the Well pad occurred sometime between November 30, 2007 and June 17, 2008. For the purpose of settling this matter under terms agreed to under this AOC, the parties have agreed to use a period of 80 days of alleged violation.

25. Rule 523. specifies a base fine of One Thousand dollars (\$1,000) for each day of violation of Rules 324A.a., 324A.b., 902.a., 903.a., and 907a.(2). Rule 523.a.(3) specifies that "the maximum penalty for any single violation shall not exceed Ten Thousand dollars (\$10,000) regardless of the number of days of such violation," unless the violation results in significant waste of oil and gas resources, damage to correlative rights, or a significant adverse impact on public health, safety or welfare or the environment.

26. Based on the above facts, COGCC Staff contends that the release or releases of fluids from the produced water pit resulted in a significant adverse impact to the environment. The release or releases of produced water and condensate impacted both ground water and surface water with dissolved and free phase hydrocarbon compounds. In June 2008, at the time of the initial discovery and emergency response activities, the concentrations of benzene detected in

water discharging from the South Spring and the North Spring were 64 µg/l and 36 µg/l, respectively, These benzene concentrations exceeded the ground water standard of 5 µg/l by 12 times at South Spring and by seven times at North Spring. In addition, free phase hydrocarbons and hydrocarbon sheen were observed on the water discharging from both South Spring and North Spring. Concentrations of these constituents subsequently decreased due to OXY's remediation activities and natural attenuations.

The South Spring, North Spring, and surface water were used by both livestock and wildlife and the area had to be fenced to prevent contact with and ingestion of the contaminated water.

27. OXY does not admit liability for any of the alleged Rule violations, and denies that such alleged violations caused a significant adverse impact to the environment. However, OXY agrees to pay the following fines as adjusted pursuant to Finding No. 41 and the COGCC Staff agrees to accept the following fines as adjusted pursuant to Finding No. 41. Both parties agree to do so in order to resolve this matter without the necessity of a contested hearing.

28. For purposes of settling this matter expeditiously, OXY should not be found in violation of Rule 209. because Rule 209. was not violated here.

29. OXY violated **Rule 324A.a.** because it placed produced water and associated condensate in a lined pit on the Well pad, but the pit liner was torn which allowed fluids to percolate into the underlying bedrock and impacted groundwater, and by so doing, OXY failed to take precautions to prevent significant adverse environmental impacts to air, water, soil, or biological resources to the extent necessary to protect public health, safety and welfare and to prevent the unauthorized discharge of oil, gas or E&P waste. A base fine of Eighty Thousand dollars (**\$80,000**) has been calculated for the violation of Rule 324A.a.

30. OXY violated **Rule 324A.b.** because it placed produced water and associated condensate in a lined pit on the Well pad, but the pit liner was torn which allowed fluids to percolate into the underlying bedrock and impact groundwater, and by so doing, OXY performed an oil and gas related act or practice which constituted a violation of the water quality standards or classifications established by CDPHE-WQCC for waters of the state. A base fine of Eighty Thousand dollars (**\$80,000**) has been calculated for the violation of Rule 324A.b.

31. OXY violated **Rule 902.a.** because it placed produced water and associated condensate in a lined pit on the Well pad, but the pit liner was torn which allowed fluids to percolate into the underlying bedrock and impact groundwater, and by so doing, OXY failed to construct and operate an E&P pit to protect waters of the state from significant adverse impacts from E&P waste. A base fine of Eighty Thousand dollars (**\$80,000**) has been calculated for the violation of Rule 902.a.

32. OXY violated **Rule 903.a.** because it used an unpermitted pit to manage produced water from on or around the date of well completion (October 25, 1998) through the date the release was discovered (June 17, 2008), a period of 3,523 days. COGCC Staff have calculated a base fine of Ten Thousand dollars (**\$10,000**) based on the maximum penalty provision set forth in Rule 523. absent a showing that the violation resulted in significant waste of oil and gas resources, damage to correlative rights, or a significant adverse impact on public health, safety or welfare or the environment.

33. For purposes of settling this matter expeditiously, OXY should not be found in violation of Rule 906.a. because OXY demonstrated a prompt, effective and prudent response to the release.

34. For purposes of settling this matter expeditiously, OXY should not be found in violation of Rule 906.b.(3) because OXY demonstrated a prompt, effective and prudent response to the release.

35. For purposes of settling this matter expeditiously, OXY should not be found in violation of Rule 907.a.(1) because the alleged violation of Rule 907.a.(1) can be combined with the alleged violation of Rule 907.a.(2).

36. OXY violated **Rule 907.a.(2)** because it placed produced water and condensate in a lined production pit on the Well pad when the pit liner was torn, which allowed fluids to percolate into the underlying bedrock and impact groundwater, and by so doing, OXY failed to conduct and operate E&P waste management activities in a manner which ensured the protection of the waters of the state from significant adverse environmental impacts from E&P waste. A base fine of Eighty Thousand dollars (**\$80,000**) has been calculated for the violation of Rule 907.a.(2).

37. COGCC Staff specifically reserve the right to proceed as to alleged violations of Rules 906.a., 906.b.(3), and 907.a.(1), if this matter is not resolved by this AOC. Nothing within this AOC should be construed as the COGCC Staff waiving their right to prosecute any violation set forth in this AOC in the event that this AOC is not executed by the parties and approved by the Commission.

38. In summary, OXY should be found in violation of Rules 324A.a., 324A.b., 902.a., 903.a., and 907a.(2) as described herein, for failing to properly permit, construct, maintain, and repair the pit on the Well pad so that E&P waste was not released, and base fines levied as compiled in the table below:

<i>Rule Violation</i>	<i>Days of Violation</i>	<i>Fine Amount/Violation</i>
324A.a.	80	\$80,000
324A.b.	80	\$80,000
902.a.	80	\$80,000
903.a.	10	\$10,000
907.a.(2)	80	\$80,000
<b>Total Maximum Allowable Fine</b>		<b>\$330,000</b>

39. Because the base fine for these violations is set at \$1000 per day of violation, the aggravating factors set forth in Rule 523.d. are not applicable by their terms.

40. The following mitigating factors were considered in reducing the maximum allowable fine amount by twenty two percent (22%):

(1) Twelve percent (12%) for combined Rule 523.d.(2), because OXY demonstrated a prompt, effective and prudent response to the violations, and Rule 523.d.(3), because OXY cooperated with the Commission. OXY's response to the release was comprehensive and effective in limiting the impact of the release, including reducing the concentrations of constituents towards meeting applicable WQCC ground water standards. OXY promptly constructed berms, trenches, and bypasses, as well as the placement of booms, to further confine the release. OXY fenced the impacted area to restrict access by domestic livestock and wildlife. OXY constantly monitored and sampled numerous points in and around the release areas. Further, OXY voluntarily performed an ORC-Advance chemical oxidation treatment to aid in the breakdown of the released hydrocarbons; and

(2) Ten percent (10%) under Rule 523.d.(6), because OXY incurred approximately \$900,000 in costs for its remediation efforts to date, and these costs substantially exceed any economic benefit from the violations. Further, OXY has spent another \$8,000,000 to decrease the risk of future ground or surface water impacts from its operations in this area by reducing the number of the pits it uses to manage fluids in the area from approximately 23 to one fresh water pond and ten treated produced water ponds and is now utilizing onsite produced water storage tanks with automatic well shut-in technology should the storage tanks reach capacity.

41. The parties agree to a fine of Two Hundred Fifty Seven Thousand, Four Hundred dollars (\$257,400), which takes into consideration a 22% fine reduction for mitigating factors.

42. Payment of the fine pursuant to this AOC does not relieve the operator from its obligations to complete abatement or corrective actions set forth in the NOAV, as may be amended or modified by Staff.

43. OXY should execute this AOC no later than 14 days after the date it is executed by Staff for recommendation to the Commission for expedited approval. Fines may increase if this matter is not recommended for expedited approval.

44. OXY, or its successors or assigns, should be required to remain responsible for complying with this AOC, in the event of any subsequent sale of property.

45. Pursuant to Article IX, of the "Memorandum of Agreement" between the Water Quality Control Division ("WQCD") and the COGCC, adopted February 15, 2000, COGCC Staff conferred with WQCD enforcement staff in determining the monetary penalty against OXY for violations of WQCC standards for surface waters. WQCD indicated it agrees with the fine and the terms of this AOC and will not pursue any additional penalty.

46. OXY agrees to the findings of this AOC only for the purpose of expeditiously resolving the matter without a contested hearing. Notwithstanding the above, OXY does not admit to any of the factual or legal determinations made by the Commission herein, and fully reserves its right to contest same in any future action or proceeding other than a proceeding to enforce this AOC.

#### ORDER

NOW, THEREFORE, IT IS ORDERED, that OXY USA WTP LP shall be found in violation of the Rules set forth in Finding No. 38, above, for oil and gas operations at the Cascade Creek #605-1 Well, located in the SE¼ NW¼ of Section 5, Township 6 South, Range 97 West, 6<sup>th</sup> P.M., for those acts alleged in this AOC.

IT IS FURTHER ORDERED, that OXY USA WTP LP shall be assessed a total adjusted fine of Two Hundred Fifty Seven Thousand, Four Hundred dollars (\$257,400) for the Rule violations set forth in Finding No. 38, above, which shall be payable within thirty (30) days of the date the order is approved by the Commission.

IT IS FURTHER ORDERED, that this Administrative Order by Consent does not relieve the operator from undertaking and completing abatement or corrective actions that may be required by the Notice of Alleged Violation described in Finding No. 18, above, or any amendments or modifications thereto specified by Staff. In addition by May 1, 2010, the operator must submit for COGCC approval an addendum to the existing Form 27, *Site Investigation and Remediation Workplan* (a.k.a. COGCC Remediation Project No. 4622) that includes a schedule for the submittal of quarterly written progress reports of ongoing remediation and monitoring of the impacts to the Conn Camp area, the first of which shall be submitted on July 15, 2010.

IT IS FURTHER ORDERED, that the operator shall execute this Administrative Order by Consent no later than fourteen (14) days after the date it is executed by the Staff for recommendation of expedited approval by the Commission.

IT IS FURTHER ORDERED, that under the State Administrative Procedure Act the Commission considers this order to be final agency action for purposes of judicial review within thirty (30) days after the date this order is mailed by the Commission.

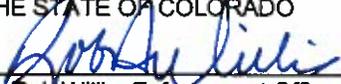
IT IS FURTHER ORDERED, that an application for reconsideration by the Commission of this order is not required prior to the filing for judicial review.

IT IS FURTHER ORDERED, that the provisions contained in the above order shall become effective forthwith.

IT IS FURTHER ORDERED, that the Commission expressly reserves its right after notice and hearing, to alter, amend, or repeal any and/or all of the above orders.

RECOMMENDED this 22<sup>nd</sup> day of April, 2010.

OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF COLORADO

By   
Rob Willis, Enforcement Officer

Dated at Suite 801  
1120 Lincoln St.  
Denver, Colorado 80203  
April 19, 2010

AGREED TO AND ACCEPTED this 21st day of April, 2010.

OXY USA WTP LP

By W.B. Roby  
Signature of Authorized Company Representative

*JK/BEM*

William B Roby

Print Signatory Name

Vice-President, Mid-Continent

Title

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This cause came on for hearing before the Commission at 9:00 a.m. on April 29, 2010, in Suite 801, The Chancery Building, 1120 Lincoln Street, Denver, Colorado, for the approval of this Administrative Order by Consent.

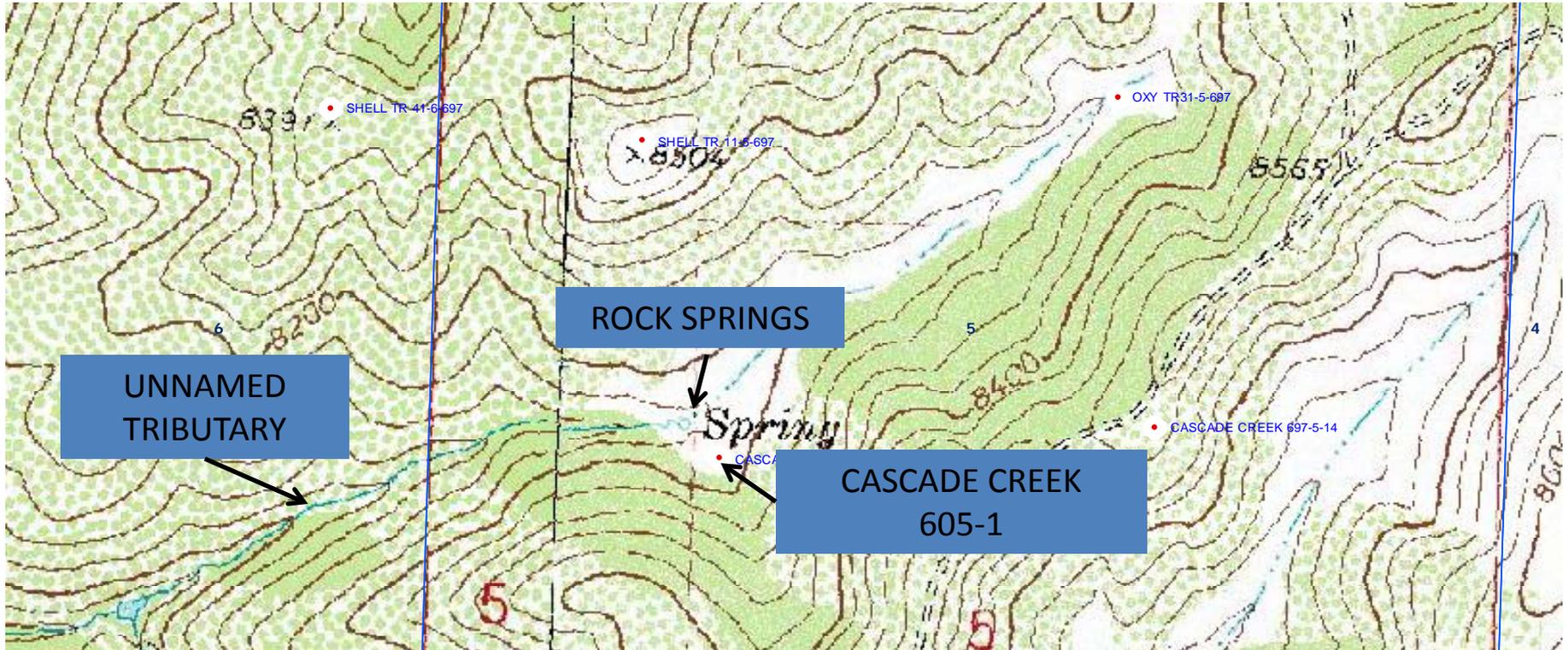
ENTERED this 20<sup>th</sup> day of May, 2010, as of April 29, 2010.

OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF COLORADO

By Carol Harmon  
Carol Harmon, Secretary

Dated at Suite 801  
1120 Lincoln Street  
Denver, Colorado 80203  
May 20, 2010

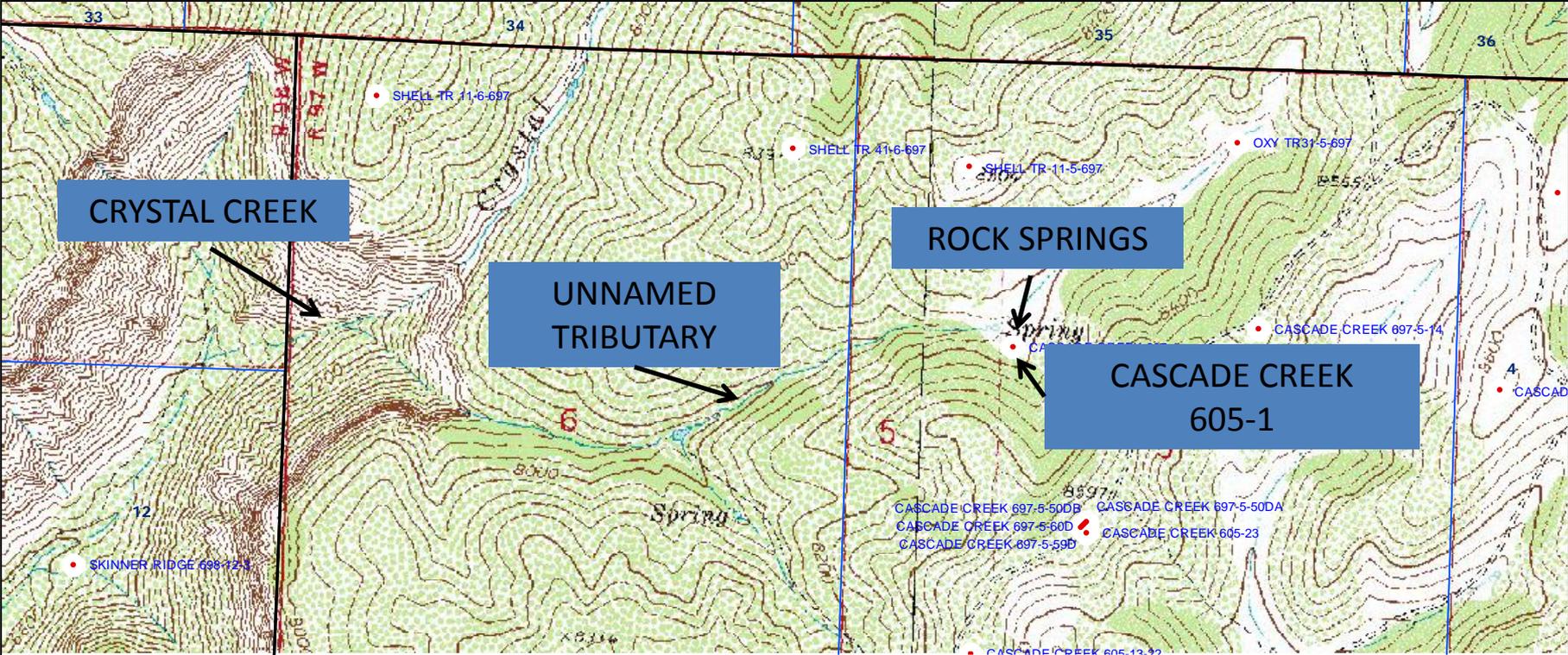
ATTACHMENT 1  
OXY CASCADE CREEK 605-1 (API 05-045-06897)  
SE NW SECTION 5 T6S R97W



ATTACHMENT 2  
CASCADE CREEK #605-1  
ORIGINAL PRODUCTION PIT WITH TORN LINER

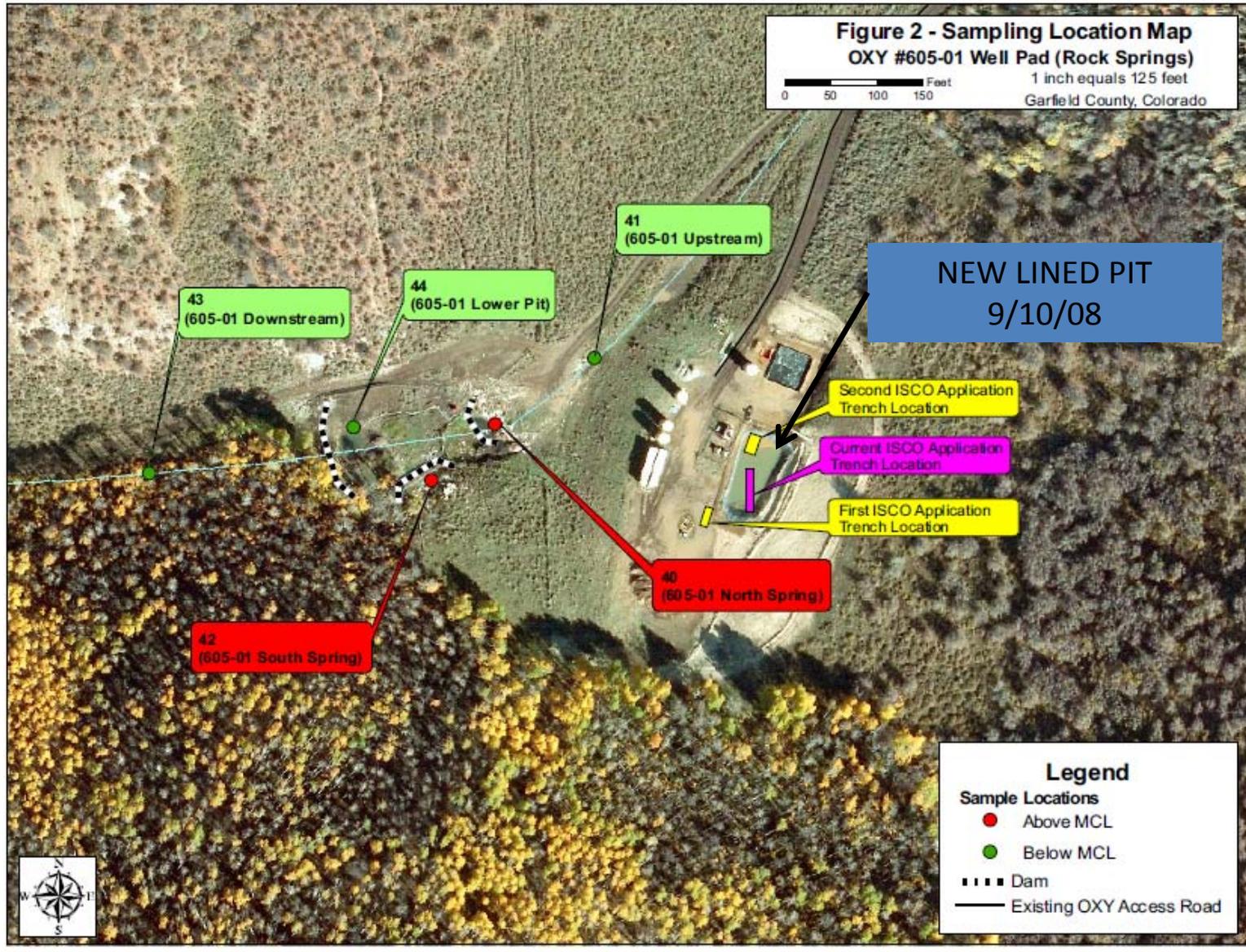


ATTACHMENT 3  
ROCK SPRINGS AND OTHER SURFACE WATER FEATURES  
SECTION 5 T6S R97W



# ATTACHMENT 4

## CASCADE CREEK 605-1 WELL PAD AND ROCK SPRINGS





ATTACHMENT 5 – ROCK SPRINGS  
NORTH SPRING  
SERIES OF BASTIONS  
PUMPING IMPACTED WATER TO  
FRAC TANK

Source COGCC 6/25/08

ATTACHMENT 6 – ROCK SPRINGS  
NORTH SPRING SERIES OF BASTIONS - PUMPING IMPACTED WATER



Source COGCC 6/25/08



## ATTACHMENT 7– ROCK SPRINGS

SHEEN ON WATER DISCHARGING  
FROM SPRING

Source COGCC 6/25/08