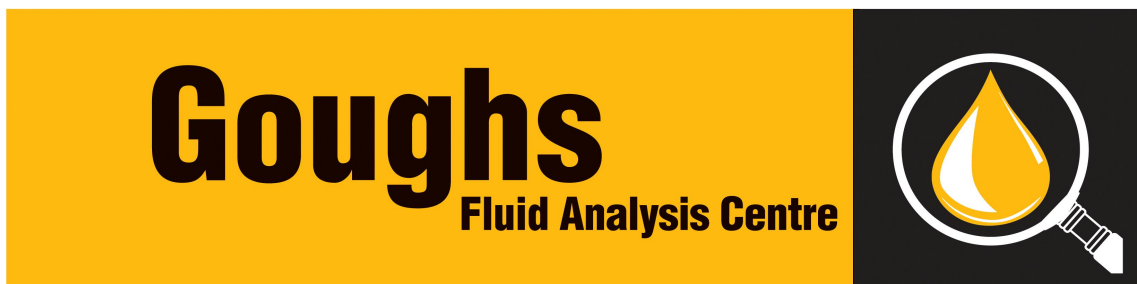




# Gough's Fluid Analysis Centre

## Handbook



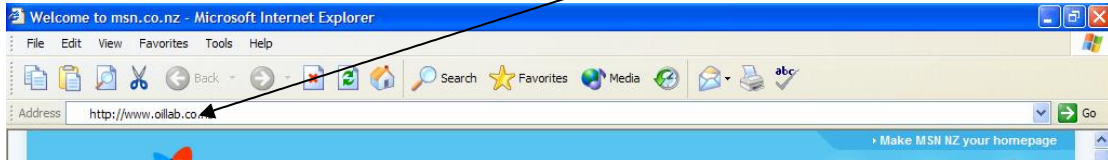
## INTRODUCTION

This handbook has been written to assist users of the Gough's Fluid Analysis programme to understand the Oil Commander online web site and how to read the results.

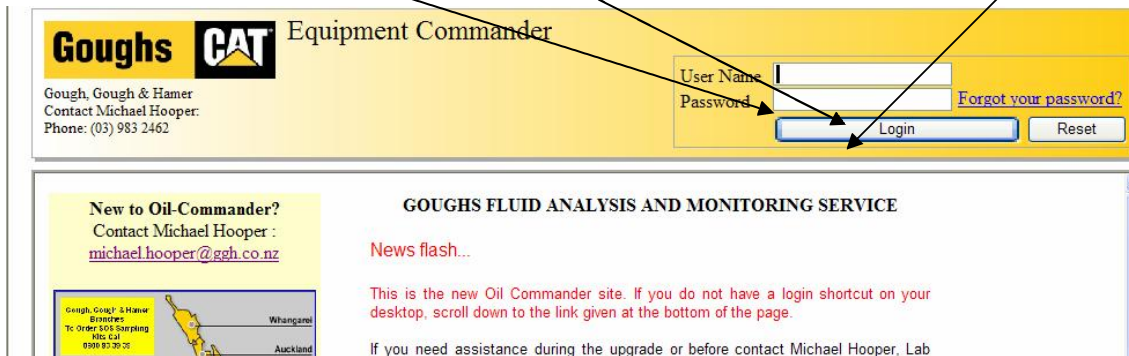
## OIL COMMANDER

The following text details how to access the programme.

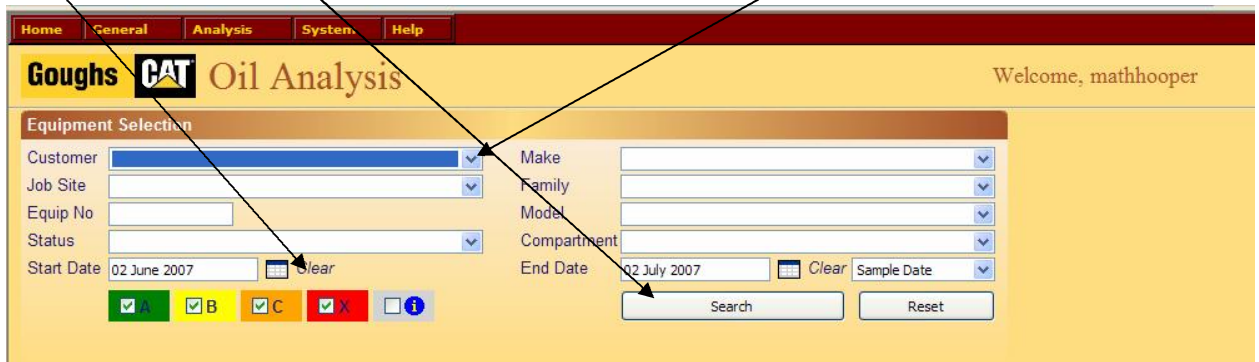
1. Firstly go to Internet Explorer and type in [www.oillab.co.nz](http://www.oillab.co.nz) in the address line and press enter on the keyboard.



2. Now enter your user name and password in the appropriate box and click the Login bar.



3. If your company name is not in the Customer box click on the down arrow and select from the names available, It is recommended to clear the start date by clicking on the word Clear, then click on "Search"



4. Having clicked on the search button all the machines/sample data will appear below. If you have a large number of machines there will be a number of pages available.

**Equipment Selection**

Customer: CAT RENTAL MACHINE INVENTORY : CATRNT  
 Job Site:   
 Equip No:   
 Status:   
 Start Date: 13 October 2005  
 End Date: 13 October 2006  
 Sample Date:   
 A  B  C  X  I

**Code Key**

X = Solved X = Action Taken X = Email Sent X = Confirmed X = Sample Image

**Search Results**

Serial No	Unit No	Model	Customer	Compartment	S1	Date2	Date3	Date4
10277	CR8084	R2	CAT RENTAL MACHINE INVENTORY DIFFERENTIAL REAR	B	A			
10277	CR8084	R2	CAT RENTAL MACHINE INVENTORY ENGINE	B	A			
10277	CR8084	R2	CAT RENTAL MACHINE INVENTORY FINAL DRIVE FRONT LEFT	B	A			
10277	CR8084	R2	CAT RENTAL MACHINE INVENTORY FINAL DRIVE FRONT RIGHT	B	A			
10277	CR8084	R2	CAT RENTAL MACHINE INVENTORY HYDRAULIC	B	A			
10756	CR8087	R25	CAT RENTAL MACHINE INVENTORY DIFFERENTIAL	A	A	09 Mar 2006		
10756	CR8087	R25	CAT RENTAL MACHINE INVENTORY ENGINE	A	A	09 Mar 2006		
10756	CR8087	R25	CAT RENTAL MACHINE INVENTORY HYDRAULIC	A	A	09 Mar 2006		
10756	CR8087	R25	CAT RENTAL MACHINE INVENTORY PLANTETARY DRUM	B	A	09 Mar 2006		
10756	CR8087	R25	CAT RENTAL MACHINE INVENTORY VIBRATORY SUPPORT	A	A	09 Mar 2006		
11526	CR8109	R25	CAT RENTAL MACHINE INVENTORY COOLING SYSTEM	C	A	12 May 2006		
11526	CR8109	R25	CAT RENTAL MACHINE INVENTORY ENGINE	B	A	12 May 2006		
11526	CR8109	R25	CAT RENTAL MACHINE INVENTORY FINAL DRIVE FRONT LEFT	B	A	12 May 2006		

5. To access an individual result, place the cursor on the evaluation code, then left click with the mouse button and a menu will appear, select the Details option.

6. When the Details screen is open, the comments concerning this sample can be seen, plus the readings from the last four samples.

**Sample Details**

Sample Number 1

Serial No: 3MR03771  
 Unit No: CR3082  
 Customer: CAT RENTAL MACHINE INVENTC  
 Compartment: ENGINE : 100  
 Make: CATERPILLAR  
 Model: 320B CAT  
 Location: AUCKLAND

Eval Code: A  
 Lab Number: 060900408  
 Sample Date: 30 August 2006  
 Date Received: 01 September 2006  
 Interpretation Date: 05 September 2006  
 Job No:  
 Coolant:

Meter Reading: 7989  
 Oil Hrs: 239  
 Oil Type: CAT DEO  
 Oil Grade: 15W40  
 Oil Chg: Yes  
 Oil Added: 0  
 Filter Chg: Yes

Sample has attachment: No  
 Email Sent: No  
 Problem Solved: No  
 Reply Email(s): No  
 Action Taken: No  
 Sample Confirmed: No

**Interpretation Comments**

All wear levels appear normal. Infra red test indicate that soot, oxidation and sulphation levels are normal. Continue to sample at the specified intervals. If assistance is required phone Jason (03) 983 2441.

Cu	Fe	Cr	Pb	Al	Si	Na	Sn	Mo	Ni	V	g	Zn	Ca	P	B	Ba	Cd	Mn	Ag	Ti	V	K	W	NIT	GLY	F	ST	SUL	OXI	DEP	V100	V40	PQ	ISO2	ISO5	ISO15	PC2	PC5	PC10	PC15	PC20	PC25	PC50	PC
2	15	2	2	2	3	2	0	9	0	252	1161	2328	1073	1	0	0	0	0	0	0	1	0	40	0	0	117	27	28	-	-	104.3	11	-	-	-	-	-	-	-	-	-	-	-	-
1	14	4	2	2	3	0	0	8	0	245	1126	2054	1024	1	0	0	0	0	0	0	1	0	37	0	0	103	25	25	-	-	101.7	7	-	-	-	-	-	-	-	-	-	-	-	-
0	6	1	2	2	2	1	2	0	0	270	1217	2150	1041	1	0	0	0	0	0	0	0	0	20	0	0	66	9	15	-	-	91.4	5	-	-	-	-	-	-	-	-	-	-	-	-
1	11	2	2	2	3	1	3	0	0	297	1240	2195	1022	1	0	0	0	0	0	0	0	0	31	0	0	100	16	23	-	-	93.5	15	-	-	-	-	-	-	-	-	-	-	-	-

**Note:** Each night a summary email is transmitted to the clients, clicking on the "More Info" link this will open the above "Details" screen.

7. The sample drop down menu also has a selection of other options.

**Goughs CAT Oil Analyse** Welcome, michaelh

**Equipment Selection**

Customer: CAT RENTAL MACHINE INVENTORY : CATRNT  
 Job Site: [Dropdown]  
 Equip No: [Text]  
 Status: [Dropdown]  
 Start Date: 13 October 2005  
 End Date: 13 October 2006  
 Sample Date: [Dropdown]

**Code Key**  
 X = Solved X = Action Taken X = Email Sent X = Confirmed X = Sample Image

**Search Results** Page 1 2 3 4 5 6 7 8 9 10

Serial No	Unit No	Model	Customer	Compartment	S1	Date2	Date3	Date4
10277	CR8084	R2	CAT RENTAL MACHINE INVENTORY DIFFERENTIAL REAR	B				
10277	CR8084	R2	CAT RENTAL MACHINE INVENTORY ENGINE	B				
10277	CR8084	R2	CAT RENTAL MACHINE INVENTORY FINAL DRIVE FRONT LEFT	B				
10277	CR8084	R2	CAT RENTAL MACHINE INVENTORY FINAL DRIVE FRONT RIGHT	B				
10277	CR8084	R2	CAT RENTAL MACHINE INVENTORY HYDRAULIC	B				
10756	CR8087	R25	CAT RENTAL MACHINE INVENTORY DIFFERENTIAL					
10756	CR8087	R25	CAT RENTAL MACHINE INVENTORY ENGINE			09 Mar 2006		
10756	CR8087	R25	CAT RENTAL MACHINE INVENTORY HYDRAULIC			09 Mar 2006		

8. Full History. Details the readings of all previous samples.

**Goughs CAT Full History** Welcome, michaelh

**Equipment Details** Actual PPM/Phr

Model: 769C Unit No: 01X02471 Compartment SN: 01X02471100  
 Serial No: 01X02471 Compartment: ENGINE : 100

Lab Number	Sample Date	Meter Read	Oil Hrs	Oil Add	Oil Chg	Filter Chg	Eval	Cu	Fe	Cr	Pb	Al	Si	Na	Sn	Mo	Ni	Mg	Zn	Ca	P	B	Ba	Cd	Mn	Ag	Ti	V	K	W	NiT	GLYF	ST	SUL	OXI
070615531	22 Jun 2007	22172	500		Y	Y		5	14	0	1	2	4	2	0	3	0	302	1878	3518	1715	4	0	0	0	0	0	1	12.9	8	1	0	18	18	15
070520212	28 May 2007	21579	222	0	Y	Y		2	16	0	1	2	3	2	0	1	0	311	1533	2832	1369	0	0	0	0	0	0	1	14.1	8	1	0	25	18	14
070500413	28 Apr 2007	21357	253	0	Y	Y		2	19	0	0	2	3	2	0	0	0	314	1631	3015	1475	1	0	0	0	0	0	0	16.4	9	2	0	31	20	13
070316228	23 Mar 2007	21104	334	0	Y	Y		1	19	0	1	2	3	2	0	1	0	265	1458	2555	1273	3	0	0	0	0	0	1	16.5	9	1	0	36	20	14
070204320	08 Feb 2007	20770	306	0	Y	Y		2	24	0	2	1	3	3	0	1	0	317	1736	3175	1569	1	0	0	0	0	0	1	14.3	9	1	0	32	20	14
061211325	12 Dec 2006	20464	284	0	Y	Y		3	19	0	1	2	4	0	1	1	0	320	1318	2531	958	1	0	0	0	0	0	0	14.6	6	1	0	26	14	11
061103822	04 Nov 2006	20180	514		Y	Y		9	33	1	4	3	5	4	1	10	1	305	1327	3032	1323	3	0	0	1	0	0	1	0	10	2	0	42	22	17
060901415	02 Sep 2006	19666	296	0	Y	Y		1	16	0	1	1	3	4	0	9	0	251	1102	2316	989	2	0	0	0	0	0	1	0	45	0	0	86	25	25
060711522	21 Jul 2006	19370	342	0	Y	Y		1	20	0	2	2	5	7	0	4	0	282	1182	2306	1138	2	0	0	1	0	0	1	0	48	0	0	89	27	31
060602622	02 Jun 2006	19028	416	0	Y	Y		2	22	0	2	2	9	31	0	30	0	262	1182	2458	900	5	0	0	0	0	0	1	0	48	0	0	90	19	25
060315413	27 Mar 2006	18612	249	0	Y	Y		0	8	0	0	0	12	158	4	0	0	173	916	1381	914	37	0	0	0	0	0	4	0	38	0	0	75	19	22
060210313	18 Feb 2006	18363	372	0	Y	Y		7	19	0	3	2	26	267	1	1	0	276	1201	2309	953	43	0	0	0	0	0	1	0	42	0	0	87	21	26
051209617	16 Dec 2005	17991	270	0	Y	Y		1	14	0	1	1	14	276	1	0	0	291	1094	2183	930	43	0	0	0	0	0	0	0	41	0	0	88	19	40
051104819	08 Nov 2005	17721	409	48.00	Y	Y		3	25	1	4	2	22	380	1	1	1	281	1205	2109	899	56	0	0	1	0	0	1	0	60	0	0	100	56	44
050905620	10 Sep 2005	17312	317	0	Y	Y		2	24	1	4	2	16	61	2	1	1	236	1054	1872	867	11	0	0	1	0	0	2	0	46	0	0	83	40	35
050712119	27 Jul 2005	16995	216	0	Y	Y		1	15	0	3	2	6	5	3	0	0	245	1078	1943	957	2	0	0	0	0	0	0	0	41	0	0	81	35	34
050607321	16 Jun 2005	16779	250		Y	Y		2	22	0	4	3	11	11	1	1	1	273	1205	2157	1100	1	0	0	1	0	0	0	0	41	0	0	96	38	25
050506917	13 May 2005	16540	261	0	Y	Y		3	36	1	5	5	24	47	2	1	1	291	1204	2359	1139	9	0	0	1	0	0	2	0	36	0	0	86	32	33
050309923	21 Mar 2005	16309	30	0	N	N		4	42	0	4	2	11	170	1	0	1	276	1177	2373	1113	39	0	0	1	0	0	4	0	20	0	0	47	16	19

9. By clicking on the Action Taken selection in the drop down menu permits the opening of a special screen where information on the actions taken following an oil sample analysis.

**Goughs CAT Full History** Welcome, michaelh

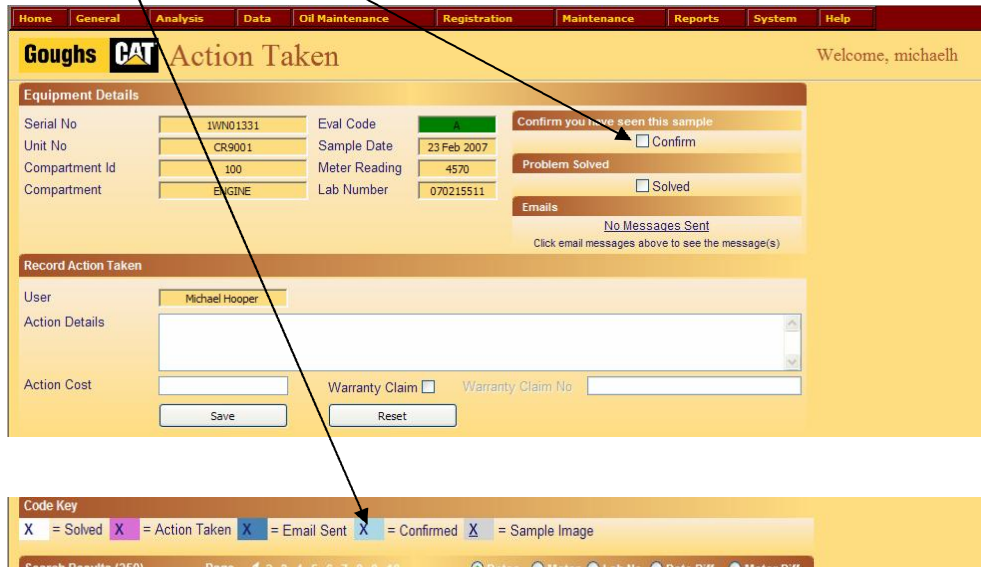
**Equipment Details** Actual PPM/Phr

Model: 769C Unit No: 01X02471 Compartment SN: 01X02471100  
 Serial No: 01X02471 Compartment: ENGINE : 100

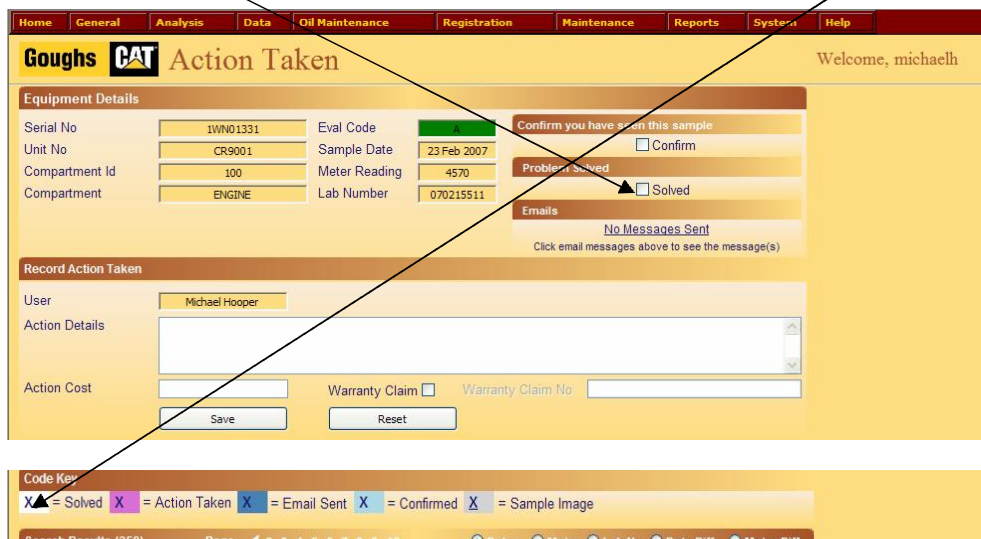
Lab Number	Sample Date	Meter Read	Oil Hrs	Oil Add	Oil Chg	Filter Chg	Eval	Cu	Fe	Cr	Pb	Al	Si	Na	Sn	Mo	Ni	Mg	Zn	Ca	P	B	Ba	Cd	Mn	Ag	Ti	V	K	W	NiT	GLYF	ST	SUL	OXI
070615531	22 Jun 2007	22172	500		Y	Y		5	14	0	1	2	4	2	0	3	0	302	1878	3518	1715	4	0	0	0	0	0	1	12.9	8	1	0	18	18	15
070520212	28 May 2007	21579	222	0	Y	Y		2	16	0	1	2	3	2	0	1	0	311	1533	2832	1369	0	0	0	0	0	0	1	14.1	8	1	0	25	18	14
070500413	28 Apr 2007	21357	253	0	Y	Y		2	19	0	0	2	3	2	0	0	0	314	1631	3015	1475	1	0	0	0	0	0	0	16.4	9	2	0	31	20	13
070316228	23 Mar 2007	21104	334	0	Y	Y		1	19	0	1	2	3	2	0	1	0	265	1458	2555	1273	3	0	0	0	0	0	1	16.5	9	1	0	36	20	14
070204320	08 Feb 2007	20770	306	0	Y	Y		2	24	0	2	1	3	3	0	1	0	317	1736	3175	1569	1	0	0	0	0	0	1	14.3	9	1	0	32	20	14
061211325	12 Dec 2006	20464	284	0	Y	Y		3	19	0	1	2	4	0	1	1	0	320	1318	2531	958	1	0	0	0	0	0	0	14.6	6	1	0	26	14	11
061103822	04 Nov 2006	20180	514		Y	Y		9	33	1	4	3	5	4	1	10	1	305	1327	3032	1323	3	0	0	1	0	0	1	0	10	2	0	42	22	17
060901415	02 Sep 2006	19666	296	0	Y	Y		1	16	0	1	1	3	4	0	9	0	251	1102	2316	989	2	0	0	0	0	0	1	0	45	0	0	86	25	25
060711522	21 Jul 2006	19370	342	0	Y	Y		1	20	0	2	2	5	7	0	4	0	282	1182	2306	1138	2	0	0	1	0	0	1	0	48	0	0	89	27	31
060602622	02 Jun 2006	19028	416	0	Y	Y		2	22	0	2	2	9	31	0	30	0	262	1182	2458	900	5	0	0	0	0	0	1	0	48	0	0	90	19	25
060315413	27 Mar 2006	18612	249	0	Y	Y		0	8	0	0	0	12	158	4	0	0	173	916	1381	914	37	0	0	0	0	0	4	0	38	0	0	75	19	22
060210313	18 Feb 2006	18363	372	0	Y	Y		7	19	0	3	2	26	267	1	1	0	276	1201	2309	953	43	0	0	0	0	0	1	0	42	0	0	87	21	26
051209617	16 Dec 2005	17991	270	0	Y	Y		1	14	0	1	1	14	276	1	0	0	291	1094	2183	930	43	0	0	0	0	0	0	0	41	0	0	88	19	40
051104819	08 Nov 2005	17721	409	48.00	Y	Y		3	25	1	4	2	22	380	1	1	1	281	1205	2109	899	56	0	0	1	0	0	1	0	60	0	0	100	56	44
050905620	10 Sep 2005	17312	317	0	Y	Y		2	24	1	4	2	16	61	2	1	1	236	1054	1872	867	11	0	0	1	0	0	2	0	46	0	0	83	40	35
050712119	27 Jul 2005	16995	216	0	Y	Y		1	15	0	3	2	6	5	3	0	0	245	1078	1943	957	2	0	0	0	0	0	0	0	41	0	0	81	35	34
050607321	16 Jun 2005	16779	250		Y	Y		2	22	0	4	3	11	11	1	1	1	273	1205	2157	1100	1	0	0	1	0	0	0	0	41	0	0	96	38	25
050506917	13 May 2005	16540	261	0	Y	Y		3	36	1	5	5	24	47	2	1	1	291	1204	2359	1139	9	0	0	1	0	0	2	0	36	0	0	86	32	33
050309923	21 Mar 2005	16309	30	0	N	N		4	42	0	4	2	11	170	1	0	1	276	1177	2373	1113	39	0	0	1	0	0	4	0	20	0	0	47	16	19

10. The Actions Taken screen permits information undertaken by the client/service providers to be recorded in the system via the client/service provider's login as follows:

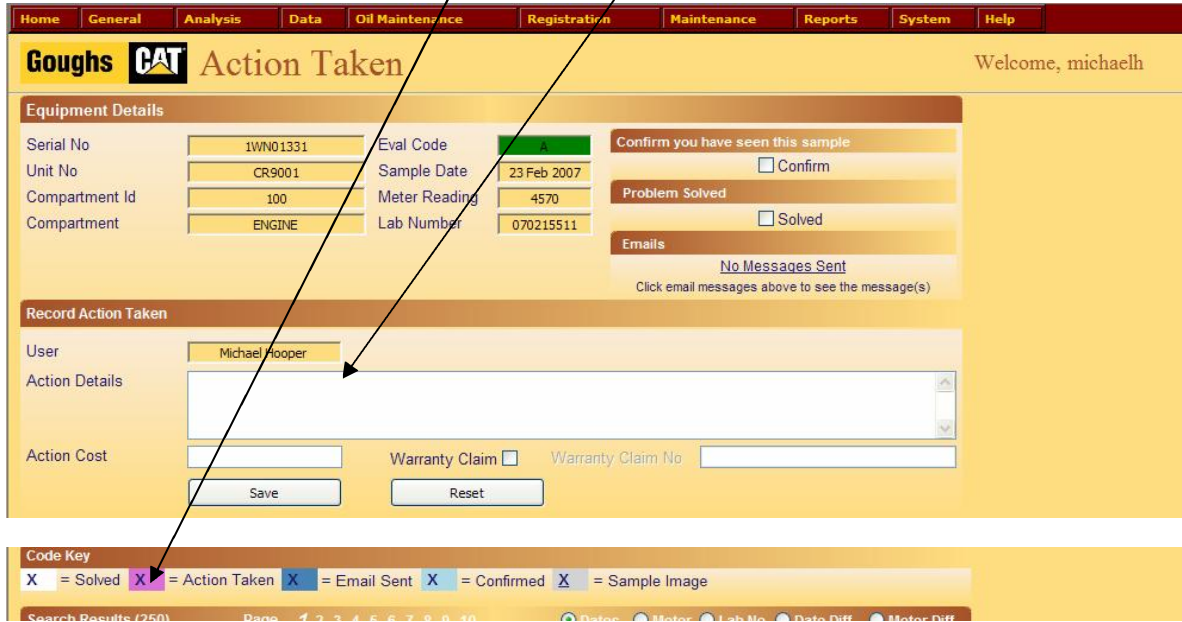
- 10.1 Confirmation that the sample results have been read is notified by clicking in the box "Confirm". This will change the evaluation code box colour to light blue (as shown in the Code Keys).



- 10.2 Confirmation that a problem was identified and solved is notified by clicking in the box "Solved". This will change the evaluation code box colour to white.



10.3 To record actions undertaken as a result of the oil sample or any other relevant information, type it in the Action Details box. This will change the evaluation code box colour to darkish pink.



**Home** **General** **Analysis** **Data** **Oil Maintenance** **Registration** **Maintenance** **Reports** **System** **Help**

**Goughs CAT Action Taken** Welcome, michaelh

**Equipment Details**

Serial No	1WN01331	Eval Code	A	<b>Confirm you have seen this sample</b> <input type="checkbox"/> Confirm <b>Problem Solved</b> <input type="checkbox"/> Solved <b>Emails</b> <a href="#">No Messages Sent</a> <small>Click email messages above to see the message(s)</small>
Unit No	CR9001	Sample Date	23 Feb 2007	
Compartment Id	100	Meter Reading	4570	
Compartment	ENGINE	Lab Number	070215511	

**Record Action Taken**

User: Michael Hooper

Action Details:

Action Cost:     Warranty Claim     Warranty Claim No:

**Code Key**

X = Solved    **X** = Action Taken    X = Email Sent    X = Confirmed    X = Sample Image

Search Results (250)    Page: 1 2 3 4 5 6 7 8 9 10    Data    Motor    Lab No    Date Diff    Motor Diff